

C I T Y O F L E E D S

R E P O R T
ON THE
HEALTH
OF THE CITY
FOR THE YEAR 1961

BY

Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Medical Officer of Health and Principal School Medical Officer.

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HEALTH COMMITTEE

LORD MAYOR (Alderman Percival Arthur Woodward, J.P.)

Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E. (to May, 1961).	Councillor W. M. JONES (Deputy Chairman).
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H. (to June, 1961).	„ F. STUBLEY (to May, 1961).
„ F. NAYLOR (to May 1961, and from August, 1961).	„ G. I. ADDLESTONE.
Councillor A. M. VICKERS (to May, 1961).	„ A. CHADWICK.
„ VYVYAN M. CARDNO.	„ W. MERRITT, S.R.N., R.M.N.
„ L. WALSH, M.B., Ch.B.	„ G. MURRAY.
„ H. DRAKE, L.D.S., R.C.S., Barrister at Law (to May, 1961).	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.
	„ St. JOHN BINNS.
	„ S. A. CODD.
	„ B. EMMETT (from May, 1961).

Ex-OFFICIO MEMBERS :—

Representatives of Leeds Medical Committee (National Health Service)
invited to attend in an advisory capacity :—

Dr. J. H. E. MOORE, Deputy :—Dr. W. ADAMS

SUB-COMMITTEES

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE
Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E. (to May, 1961).	Councillor D. W. BRADLEY, LL.B., L.A.M.T.P.I.
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H. (to June, 1961).	„ A. CHADWICK (to May, 1961).
„ F. NAYLOR (to May, 1961).	„ W. MERRITT, S.R.N., R.M.N. (to May, 1961).
Councillor VYVYAN M. CARDNO.	„ W. M. JONES.
„ L. WALSH, M.B., Ch.B. (to May, 1961 and from September 1961).	„ S. A. CODD (to May, 1961).

Co-OPTED MEMBERS :—

Mrs. H. BEEVERS Mrs. E. E. BIBBY

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE

Chairman : Alderman Z. P. FERNANDEZ, B.A., M.D., D.P.H. (to June, 1961)

Alderman F. NAYLOR (from October, 1961)

Alderman ELIZABETH M. LISTER, M.B.E. (to May, 1961).	Councillor A. CHADWICK (to May, 1961).
" WINIFRED SHUTT.	" F. STUBLEY (to May, 1961).
" F. NAYLOR (to May, 1961 and from September, 1961).	" G. MURRAY (to May, 1961).
Councillor L. WALSH, M.B., Ch.B. (to May, 1961).	" W. MERRITT, S.R.N., R.M.N.
" D. W. BRADLEY, LL.B., L.A.M.T.P.I.	" S. A. CODD (from May, 1961).
" H. DRAKE, L.D.S., R.C.S., Barrister at Law. (to May, 1961).	

CO-OPTED MEMBERS :—

Mrs. A. R. INCE, M.B.E. Mrs. S. MURRAY Mrs. N. BILLINGTON

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

Chairman : Councillor W. M. JONES

Alderman WINIFRED SHUTT.	Councillor S. A. CODD (to May, 1961).
" F. NAYLOR (to May, 1961).	" W. MERRITT, S.R.N., R.M.N. (to May, 1961).
Councillor VYVYAN M. CARDNO (to May, 1961).	" D. W. BRADLEY, LL.B., L.A.M.T.P.I.
" H. DRAKE, L.D.S., R.C.S., Barrister at Law (to May, 1961).	" G. MURRAY.
" G. I. ADDLESTONE.	" St. JOHN BINNS.
" A. M. VICKERS (to May, 1961).	" A. CHADWICK (from May, 1961).
	" B. EMMETT (from May, 1961).

PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer	Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	G. E. WELCH, M.B., B.S., D.P.H.

Medical Staff and Nursing Staff

Chief Assistant School Medical Officer	J. G. JAMIESON, M.A., B.M., B.Ch., D.C.H.
Medical Officer for Mental Health Services	J. M. MCALPIN, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	A. SHAW, M.B., B.S., D.P.H., (to 30th May, 1961). MARGARET STEANE, M.B., Ch.B., (from 1st October, 1961).
Honorary Assistant Medical Officer of Health. (By arrangement with the University of Leeds).	A. N. MACPHAIL, M.C., M.D., Ch.B., D.P.H., Lecturer in Public Health, University of Leeds.
Assistant Medical Officer of Health for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S.
	ISOBEL B. ALEXANDER, M.B., Ch.B.
	EUGENIE C. ILLINGWORTH, B.Sc., M.D., M.B., Ch.B., M.R.C.S., L.R.C.P., D.R.C.O.G., D.C.H.
	JESSIE I. ROSIE, M.B., Ch.B., D.P.H.
	MOIRA C. ROBERTSON, M.A., B.M., B.Ch.
	BARBARA M. BROOKE, M.B., Ch.B.
	FRANCES E. SMITH, M.B., Ch.B., D.P.H.
	JAMESINA FELGATE, M.B., Ch.B.
	ETHEL MAY WRIGHT, M.B., Ch.B., D.C.H.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Health Visitor Tutor in Sole Charge ..	FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.
Supervisor of Midwives	DOROTHY HUMPHREYS, S.R.N., S.C.M. (to 31st January, 1961)
	EVELYN MANN, S.R.N., S.C.M., (from 1st February, 1961)
Superintendent, Part II Midwifery Training School.	PAMELA BIRD, S.R.N., S.C.M., M.T.D.
Superintendent Nurse, Home Nursing Service	KATHLEEN E. WHALLEY, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service. (Medical Requisites)	ELSIE BOULTON, S.R.N., S.C.M., Q.N.

Chief Public Health Inspector and Deputy

Chief Public Health Inspector..	..	J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Deputy Chief Public Health Inspector	J. H. WYATT, M.A.P.H.I.	

City Analyst and Deputy

City Analyst	R. A. DALLEY, F.R.I.C.
Deputy City Analyst	L. A. PERKIN, B.Sc., F.R.I.C.

Administrative Staff

Chief Administrative Assistant	A. BATLEY
Assistant Administrative Officer	W. WILSON, A.C.I.S.
Accountant	H. A. CORLETT, F.C.A.
Principal Clerks:—	
Statistics	E. RENSHAW
General Sanitation	J. R. MOIR
Infectious Diseases	J. K. BEEVERS
Food and Drugs	J. T. MAURY
Finance	J. PEACOCK

Disinfestation Officer	C. W. LAMB, M.R.S.H., F.R.E.S.
Chief Ambulance Officer	J. H. DAYKIN, F.I.A.O.
Home Help Organiser	Mrs. DOROTHY W. ALFORD

Consultants to the Health Committee

Consultant Adviser in Tuberculosis	G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	Professor G. R. HARGREAVES, O.B.E., M.R.C.S., L.R.C.P.
Consultant Adviser in Venereal Diseases	A. H. WILSON, M.B., Ch.B., D.P.M.
	R. D. CATTERALL, M.R.C.P.

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>							<i>No. employed at 31/12/61</i>
Public Health Inspectors	..	..	..	..	..	..	51
Female Public Health Inspector	..	..	..	..	..	..	1
Student Probationer Public Health Inspectors	..	..	..	..	..	..	15
Condemned Meat Room Attendant	..	..	..	..	..	..	1
Assistant Analysts	..	..	..	..	..	..	3
Health Visitors	..	..	..	..	..	..	62
Student Health Visitors	..	..	..	..	..	..	14
Midwives (including part-time)	..	..	..	..	..	..	53
Dispensers (including part-time)	..	..	..	..	..	..	16
Physiotherapists (including part-time)	..	..	..	..	..	..	4
Immunisation Nurses (including part-time)	..	..	..	..	..	..	3
Chiropodists (including part-time)	..	..	..	..	..	..	6
Social Workers	..	..	..	..	..	..	3
Day Nurseries	..	..	..	..	..	..	119
District Nurses (including part-time)	..	..	..	..	..	..	78
B.C.G. Nurse	..	..	..	..	..	..	1
Infectious Diseases Visitors	..	..	..	..	..	..	2
Clerical Staff	..	..	..	..	..	..	99
Welfare Foods	..	..	..	..	..	..	6
Red Court Hostel (Midwifery Training)	..	..	..	..	..	..	33
Convalescent Home, Southport	..	..	..	..	..	..	2
Mental Health Services	..	..	..	..	..	..	113
Central Ambulance Station Staff	..	..	..	..	..	..	141
General Disinfection and Disinfestation	..	..	..	..	..	..	24
Personal Disinfection and Disinfestation	..	..	..	..	..	..	6
Flushing Staff	..	..	..	..	..	..	10
Public Convenience Lighting	..	..	..	..	..	..	1
Mortuary Service	..	..	..	..	..	..	7
Rodent Operatives	..	..	..	..	..	..	7
Lavatory Attendants	..	..	..	..	..	..	27
Lavatory Cleaner	..	..	..	..	..	..	1
Caretakers and Cleaners	..	..	..	..	..	..	37
Home Helps (including part-time)	..	..	..	..	..	..	318

City of Leeds

PUBLIC HEALTH DEPARTMENT,

25 EAST PARADE,

LEEDS 1.

Tel. No. Leeds 3-0661

September, 1962

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1961.

The year 1961 was a census year—the preliminary census population for the city was 510,597. The previous census figure (1951) was 505,219. Vital statistics given in this report have been calculated on the Register General's estimate of the population at 30th June, 1961, which was 511,650 as compared with 514,760 at 30th June, 1960. One must pay tribute to the accuracy of the Registrar General's annual population estimates, for his cumulative error over ten years was no more than 4,000.

**Vital
Statistics**

The number of births registered in 1961 was 8,921 as compared with 8,789 in the previous year. The birth-rate was therefore 17.4 as compared with 17.1 in 1960 and an average of 16.4 for the 5 years 1956-60. The birth-rate for 1961 is the highest since 1948.

There were 206 deaths of infants under one year of age as against 199 in the previous year. The Infant Mortality Rate was 23, the same as in 1960 and compared with an average of 25 during the previous five years.

Deaths of infants under one month old were 132 giving a neo-natal death rate of 14.8. This is the lowest neo-natal death rate yet recorded in Leeds and compares with a rate of 14.9 in the previous year. The peri-natal mortality at 32 is slightly up on the previous year (30), but is below the five year average (35). The rise in peri-natal mortality is due to rises in both early neo-natal deaths (from 108 to 119) and stillbirths (from 163 to 170). The stillbirth rate was 18.7 per 1,000 total births as against 18.2 in 1960.

In previous years in the statistical tables I gave stillbirth rates in terms of stillbirths per 1,000 population. This is one of the recognised methods of calculating a stillbirth rate and it gives results which are comparable from year to year provided the age and sex constitution of the population remain constant. Of recent years the "bulge" in the childhood and teenage population and the increasing proportion of old people in the population have distorted stillbirth rates calculated upon population. I have therefore now adopted the alternative method of calculating the stillbirth rate as stillbirths per 1,000 total births (live and still). The stillbirth rates from 1929 onwards in the table facing page 20 have been recalculated according to the latter method. Advantage has been taken of this opportunity to introduce into the same table a new column giving peri-natal death rates. Deaths in the peri-natal period have fallen less than those at other ages in infancy and childhood and this problem is receiving increasing attention by public health workers all over the world. The Population (Statistics) Act which has now become law, makes it compulsory to register the cause of stillbirths (hitherto only the fact of stillbirth was recorded). The Act should soon give us a great deal of new information upon the causes of stillbirth and these in turn should lead to more effective prevention.

There were 3 maternal deaths giving a Maternal Mortality Rate of 0.33 as against 2 and 0.22 respectively in 1960. The general death-rate for the city was 12.5 as against 11.2 in the previous year. The higher rate was due in the main to a high prevalence of respiratory infection in the winter months, leading to more deaths from bronchitis and pneumonia.

The death rates for the principal causes of death were as follows, the figures in brackets being the rates for 1960:—

Cancer (all sites)	2.21	(2.05)
Cancer of lung and bronchus	..	..	0.57	(0.52)
Coronary disease	..	..	2.63	(2.38)
Other heart disease	..	..	1.29	(1.33)
Cerebral haemorrhage, etc.	..	..	1.70	(1.49)
Bronchitis	..	..	0.93	(0.77)
Pneumonia	..	..	0.95	(0.71)

The incidence of poliomyelitis was again very low, there being only 2 cases in the year. Once again there was no case of diphtheria. The notifications of whooping cough and scarlet fever were the lowest ever recorded in the city. The incidence of respiratory tuberculosis was a little higher than the previous year but the difference is small and is partly counterbalanced by a fall in non-respiratory tuberculosis. As already mentioned, prevalence of influenza led to an increase in notifications of pneumonia.

Infectious Disease

Recently acquired syphilis remains very uncommon. There was again an increase in gonorrhoea in both sexes and in non-gonococcal urethritis in males but the increase was smaller than in recent years.

Venereal Disease

There was a serious shortage of polio vaccine during the latter part of the year which curtailed our polio immunisation programme. However, over 24,000 persons completed two inoculations. Fourth injections for school children were authorised by the Ministry and about 24,000 school children received a fourth injection.

Vaccination and Immunisation

Again more than a quarter of a million patients were carried and the mileage exceeded one million.

Ambulance Service

It is with great regret that I record the death of Alderman Dr. Z. P. Fernandez who had for many years been Chairman of the Mental Health Sub-Committee. Dr. Fernandez was keenly interested in all aspects of mental health and was most active in implementing the many advances envisaged by the Mental Health Act. He had the satisfaction of seeing our first two mental health hostels come into operation. He was actively engaged in his Committee's work almost up to his death on 26th June.

Mental Health

At Armley Grange the year 1961 saw the completion of the project commenced in the previous year; on the 1st May, the Chairman of the Health Committee, Alderman Mrs. Shutt, opened the hostel for subnormal women.

Chiropody

This service has expanded considerably during the year: at the end of the year 6 chiropodists (2 full-time and 4 part-time) were employed. The service is still limited to the priority groups—mainly the aged.

**Home
Nursing**

The training arrangements for the National Certificate completed their first full year. Examinations under Ministry of Health auspices were held in January, May and September. Twenty-four of our trainees sat the examination and all have been successful, except one, in their first attempt.

The arrangements for laundering of bedding of incontinent patients nursed at home have proved very valuable. The original estimate that there were about 40 such patients in the city proved correct but increasing emphasis on community care and the rising proportion of old people will lead to increased demands for the service. We are most grateful to the Welfare Services Committee whose laundry carries out the washing.

Staff

In January Mr. H. P. Gill died—a great loss to the Department. Mr. Gill had been in charge of the Housing Division for 14 years and had an extensive knowledge of housing conditions in the city. His knowledge was of great value in planning and executing the city's extensive slum clearance programme.

Miss D. Humphreys retired on the 31st January after 22 years service with the Department as Supervisor of Midwives. She commenced her training as a nurse in 1926 and after obtaining the S.R.N. and C.M.B. Certificates she was employed in hospital service from 1931 until her appointment to the post of Supervisor of Midwives with the Department on the 1st February, 1939. Miss Humphreys played a big part in the successful development and maintenance of the midwifery service since that time and her efficiency in all aspects of the work and her pleasant personality have contributed in no small measure to the high standard attained by the midwifery service in the city.

As in previous years I have received the greatest help from my *Acknow-
ledgements* colleagues in other Departments of the Corporation, particularly the Town Clerk, City Treasurer, City Engineer, Chief Education Officer, City Architect, Director of Housing, Director of Works, Welfare Services Officer and Children's Officer and to them I wish to tender my thanks.

I would also offer my sincere thanks to the Chairman, Deputy Chairman and Members of Health Committee for the courtesy and assistance accorded to me and to the staff of the Public Health Department throughout the year.

I am,

Ladies and Gentlemen,

Your obedient Servant,

D. B. BRADSHAW.

SUMMARY OF VITAL STATISTICS

1961

LATITUDE $53^{\circ} 48'$ North. LONGITUDE $1^{\circ} 32'$ West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY	40,613.5 Acres
HOME POPULATION (Registrar General's Estimate) ..	511,650
ESTIMATED NUMBER OF HOUSES	174,678
RATEABLE VALUE	£7,505,687
SUM REPRESENTED BY A PENNY RATE	£30,265

		Average		
		1961.	1951-60	
BIRTH RATE (births per 1,000 living)	17.4	15.9		
DEATH RATE (deaths per 1,000 living)	12.5	11.8		
NATURAL INCREASE OF POPULATION	2,508	2,093		
(Excess of births over deaths in the year)				
INFANT MORTALITY RATE	23	27		
(Deaths under 1 year per 1,000 births)				
DEATH RATE from Pneumonia and Bronchitis	1.88	1.25		
DEATH RATE from Cancer	2.21	2.07		
DEATH RATE from Diarrhoea and Enteritis (under 2 years) per 1,000 births	0.78	0.88		

		Cases	Case- rate	Deaths	Death rate
SCARLET FEVER	215	0.42	..	..	..
DIPHTHERIA .. .. .. ..	..	..	..	..	..
POLIOMYELITIS	2	0.00	..	..	..
MEASLES	8,106	15.84	2	0.00	..
WHOOPING COUGH	413	0.81	..	..	..
RESPIRATORY TUBERCULOSIS	371	0.73	28	0.05	..
OTHER FORMS OF TUBERCULOSIS ..	33	0.06	5	0.01	..

VITAL STATISTICS
RELATING TO MOTHERS AND INFANTS

(in accordance with Ministry of Health Circular 1/60)

	1961	1960	Average 1956-60
LIVE BIRTHS—			
Number	8,921	8,789	8,397
Rate per 1,000 population	17.4	17.1	16.4
ILLEGITIMATE LIVE BIRTHS PER CENT. OF TOTAL LIVE BIRTHS ..	7.8	6.9	6.4
STILL BIRTHS—			
Number	170	163	179
Rate per 1,000 total births (live and still) ..	18.7	18.2	20.8
TOTAL BIRTHS (live and still)	9,091	8,952	8,575
INFANT MORTALITY—			
Number of deaths under 1 year of age ..	206	199	211
Infant mortality rate per 1,000 live births	23.1	22.6	25.1
Legitimate infant mortality rate	21.8	22.0	24.5
Illegitimate	38.8	31.3	33.8
NEO-NATAL MORTALITY RATE			
(First four weeks) per 1,000 live births	14.8	14.9	17.5
EARLY NEO-NATAL MORTALITY RATE (Deaths under 1 week per 1,000 live births)	13.8	12.3	14.9
PERI-NATAL MORTALITY RATE (Stillbirths and deaths under 1 week com- bined per 1,000 <u>total</u> births)	32.2	30.3	35.4
MATERNAL MORTALITY—			
Number of maternal deaths (including abortion)	3	2	4
Maternal mortality rate per 1,000 <u>total</u> births	0.33	0.22	0.49

**Natural and Social Conditions
Vital Statistics**

NATURAL AND SOCIAL CONDITIONS

Area.—The area of the city is 40,613.5 acres.

Population.—The Registrar General's estimate of the home population of the city at mid-1961 was 511,650.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1961, was 174,678.

Rateable Value.—The rateable value of the city at 1st April, 1962, was £7,505,687 and the estimated sum represented by a penny rate was £30,265. The corresponding figures at 1st April, 1961, were £7,325,101 and £29,385.

Principal Industries.—Engineering, wholesale clothing, woollen and worsted manufacture, and printing continue to be the city's principal industries. Approximate numbers of persons employed in these industries are as follows:— engineering (including metal manufacture, vehicle manufacture, metal goods and precision instruments) 50,000, wholesale clothing 43,000, woollen and worsted manufacture 13,000 and printing 10,000. Approximately 37,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

The average level of unemployment during the year was 0.8 per cent.

Meteorology.—The number of hours of bright sunshine recorded during the year was 1,150.00 hours. The sunniest month was August with a daily average of 5.68 hours and the month with the least sunshine was January with a daily average of 0.28 hours. The sunniest day of the year was June 29th with 12.75 hours and the daily average for the whole year was 3.15 hours.

The total rainfall for the year was 24.85 inches. The month with the least rain was March with a total of 0.73 inches ; the month with the most rain was January with 3.07 inches. Taking the four quarters of the year, the rainfall in the first quarter was 6.42 inches ; in the second 4.95 ; in the third 7.33 and in the fourth 6.15 inches.

The month with the highest average temperature was August with 61.76°F and the lowest December with 37.13°F. The average temperature for the whole year was 51.26°F.

VITAL STATISTICS

BIRTHS

The births registered in the city during the year numbered 9,769, comprising 5,031 males and 4,738 females. Of these, 527 males and 467 females born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 74 males and 72 females, born outside the city to Leeds parents, were transferred in, making a nett total of 8,921 births, comprising 4,578 males and 4,343 females.

The birth-rate was 17.4 per thousand of the home population, as compared with 17.1 for the previous year and an average of 16.4 for the previous five years. The birth-rate for the city was the same as that for England and Wales which was provisionally 17.4 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) is given in the table on page 5.

Excess of Births over Deaths.—The excess of births over deaths or the "natural increase of population" was 2,508 as compared with 2,998 for the previous year and an average of 2,093 for the previous ten years.

Illegitimate Births.—Of the 8,921 (nett) births registered, 695 or 7·8 per cent. were illegitimate as compared with 608 or 6·9 per cent. for the previous year and an average of 539 or 6·4 per cent. for the previous five years.

Stillbirths.—The nett number of stillbirths registered during the year was 170, comprising 89 males and 81 females. The rate per thousand of the population was 0·33 as compared with 0·32 for the previous year. Expressed as a percentage of the total births, the rate was 1·9 as compared with 1·8 for the previous year. Of the 170 (nett) stillbirths registered, 16 or 9·4 per cent. were illegitimate. The ratio of registered 'still' to registered 'live' births was 1 to 52 and compared with 1 to 54 for the previous year.

DEATHS

The gross number of deaths registered in the city was 6,835, comprising 3,475 males and 3,360 females, giving a gross death-rate of 13·4 as compared with 12·1 for the previous year and an average of 12·4 for the previous five years. The inward transferable deaths numbered 497 (238 males and 259 females) and outward transferable deaths 919 (525 males and 394 females) which, after adjustment, leaves a nett total of 6,413 deaths debitale to the city, made up of 3,188 males and 3,225 females.

The corresponding death-rate was 12·5 as compared with 11·2 for the previous year and an average of 11·5 for the previous five years. The provisional death-rate for England and Wales was 12·0.

Area Comparability Factor.—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure of the area, by sex and age, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.

The A.C.F. (Deaths) for Leeds was 1.13 and this, when applied to the crude death-rate of 12.5, gave an adjusted death-rate of 14.1.

The following table gives the crude and adjusted rates of London Administrative County and the twelve principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mortality Rate
		Crude	Adjusted	Crude	Adjusted	Resp. Tub.	Other Tub.	
London Admin. County	3,179,980	18.7	16.8	11.9	11.4	0.09	0.01	22
Birmingham	1,110,290	19.5	18.5	11.4	13.1	0.07	0.01	24
Liverpool	745,810	22.1	20.6	12.4	15.2	0.11	0.01	28
Manchester	660,300	19.7	18.9	13.5	15.8	0.08	0.01	30
Leeds	511,650	17.4	17.1	12.5	14.1	0.05	0.01	23
Sheffield	494,650	16.5	16.7	13.1	14.4	0.08	0.01	23
Bristol	436,000	16.2	16.0	12.4	11.9	0.05	0.01	18
Nottingham	313,280	18.6	17.9	12.3	14.4	0.07	0.02	28
Hull	300,790	19.7	18.9	11.8	14.3	0.08	0.00	27
Bradford	294,210	18.8	18.8	13.5	13.4	0.05	0.01	26
Leicester	273,130	17.1	17.3	12.4	12.5	0.07	0.01	24
Newcastle-upon-Tyne	267,230	18.1	17.6	12.3	13.8	0.08	0.01	24
Stoke-on-Trent	265,800	10.6	9.9	12.1	15.6	1.60	0.01	29

Causes of Death.—The principal causes of death during 1961 are given below (International List numbers in brackets).

Coronary disease (420)	..	..	..	..	..	1,347
Malignant and lymphatic neoplasms (140-205)	..	..	..	..	..	1,132
Cerebral haemorrhage, etc. (330-334)	..	..	..	..	..	870
Heart disease (410-416, 421-443)	..	..	..	..	..	667
Pneumonia (490-493, 763)	..	..	..	..	..	487
Bronchitis (500-502)	..	..	..	..	..	474
Other circulatory diseases (444-468)	..	..	..	..	..	274

The above group of diseases accounted for 5,251 or 81.7 per cent. of the total deaths as compared with 4,734 or 81.7 per cent. last year.

The table on page 9 sets out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 13 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups -1, 1-2, and 2-5 was 236 or 3·7 per cent. of the total deaths, as compared with 236 or 4·1 per cent. in the previous year and an average of 242 or 4·1 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 554 or 8·6 per cent. as compared with 531 or 9·2 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,859 or 91·4 per cent. as compared with 5,260 or 90·8 per cent. in the previous year.

Cremations.—Out of a total of 6,413 Leeds deaths during the year, the number of bodies disposed of by cremation was 3,114 or 48·6 per cent. as compared with 2,771 or 47·9 per cent. in 1960. Of this number, 2,426 were cremated at Lawnswood and the remainder, 688, at Cottingley. The total number of cremations represents an increase of 343 on the figure for the previous year and an increase of 457 on the average number of cremations for the previous five years.

Public Mortuary.—The number of bodies received into the public mortuary during 1961 was 830 as compared with 743 in 1960. The number of autopsies performed was 678. Arrangements were made by relatives or friends for the disposal of 772 bodies and by the Welfare Services Department for 45; 18 bodies were to be disposed of during 1962.

INFANT MORTALITY

The number of deaths of children under one year of age during 1961 was 206 (males 122, females 84) as compared with 199 (males 114, females 85) in 1960. The infant mortality rate was 23 as compared with 23 for the previous year and an average of 25 for the previous five years. The provisional infant mortality rate for England and Wales was 21.

Illegitimate Infant Mortality.—Of the 695 illegitimate births, 27 died before reaching the age of one year, which is equal to an infant mortality rate of 39 as compared with 31 last year.

Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were prematurity 40 (19.4 per cent.), pneumonia 36 (17.5 per cent.), congenital malformations 31 (15.0 per cent.), post-natal asphyxia and atelectasis 30 (14.6 per cent.) and birth injuries 18 (8.6 per cent.).

Respiratory diseases were responsible for 42 or 20.4 per cent. of the total deaths under one year of age ; in 1960 the number was 37 or 18.6 per cent. and the average for the previous five years was 33 or 15.8 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 14 and 18.

Prematurity.—The number of deaths from prematurity was 40. The death-rate from prematurity per thousand live births was 4.5 as compared with 4.6 for the previous year and an average of 6.5 for the previous five years. There were 32 deaths assigned to other diseases of early infancy in which prematurity was mentioned on the death certificate.

Deaths in Age Groups.—Of the total (206) infant deaths, 83 or 40.3 per cent. took place on the first day ; 123 or 59.7 per cent. in the first week ; 132 or 64.1 per cent. in the first month ; 30 or 14.6 per cent. between one and three months ; 26 or 12.6 per cent. between three and six months ; 8 or 3.9 per cent. between six and nine months and 10 or 4.9 per cent. between nine and twelve months.

Neo-Natal Mortality.—The number of deaths occurring in the first month of life was 132 or one more than in the previous year, the corresponding neo-natal mortality rate being 14.8 as compared with 14.9 in 1960.

Of the total deaths under one year of age, 64.1 per cent. occurred in the first month and of deaths in the first month 62.9 per cent. occurred on the first day, 93.2 per cent. in the first week and 96.2 per cent. in the first two weeks.

Peri-Natal Mortality.—The term “ peri-natal mortality ” has been introduced to measure infant mortality due to causes operating before, during and immediately after birth and includes stillbirths and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1961 was 32 as compared with 30 for the previous year and an average of 35 for the previous five years.

MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 3 as compared with 2 in the previous year. The corresponding maternal mortality rate per thousand total births (live and still) was 0.33 as compared with 0.22 for the previous year and an average of 0.49 for the previous five years.

The causes of death were as follows :—

- (1) 1a. Cerebral haemorrhage.
- (2) Septicæmia following septic abortion but with no evidence to show how caused.
- (3) 1a. Air embolism
b. Childbirth.

PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 961 (nett)	No. of deaths in 1960 (nett)	Death rate 1961
001-008	Tuberculosis, respiratory	28	37	0.05
010-019	Tuberculosis, other forms	5	4	0.01
020-029	Syphilitic disease	4	2	0.01
055	Diphtheria .. .. .. ..	..	..	..
056	Whooping Cough .. .. .. ..	..	..	..
057	Meningococcal infections	3	3	0.01
080	Acute poliomyelitis .. .. .. ..	..	..	..
085	Measles	2	..	0.00
Remainder of 001-138	Other infective and parasitic diseases	12	18	0.02
	Malignant neoplasms:			
151	Stomach	138	134	0.27
162, 163	Lung, bronchus	290	269	0.57
170	Breast	115	90	0.22
171-174	Uterus	62	44	0.12
Remainder of 140-203	Other malignant and lymphatic neoplasms ..	498	487	0.97
205	Leukaemia, aleukaemia	29	29	0.06
260	Diabetes	25	27	0.05
330-334	Vascular lesions of central nervous system ..	870	769	1.70
420	Coronary disease, angina	1,347	1,223	2.63
440-443	Hypertension with heart disease	91	85	0.18
Remainder of 410-443	Other heart disease	576	598	1.13
444-468	Other circulatory disease	274	245	0.54
480-483	Influenza	57	2	0.11
490-493	Pneumonia	487	367	0.95
763	Bronchitis	474	394	0.93
500-502	Other diseases of the respiratory system	32	59	0.06
470-475	Ulcer of stomach and duodenum	47	49	0.09
510-527	Gastritis, enteritis and diarrhoea	37	20	0.07
540, 541	Nephritis and nephrosis	33	30	0.06
543, 571	Hyperplasia of prostate	17	18	0.03
572, 764	Pregnancy, childbirth and abortion	3	2	0.01
640-689	Congenital malformations	50	58	0.10
750-759	Residual Other defined and ill-defined diseases	530	480	1.04
E810-E835	Motor vehicle accidents	104	72	0.20
E800-E802	All other accidents	107	113	0.21
E840-E982	Suicide	60	60	0.12
E963	Homicide and operations of war	6	3	0.01
E970-E979				
E964, E965				
E980-E999				
	Totals	6,413	5,791	12.53

CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1961.

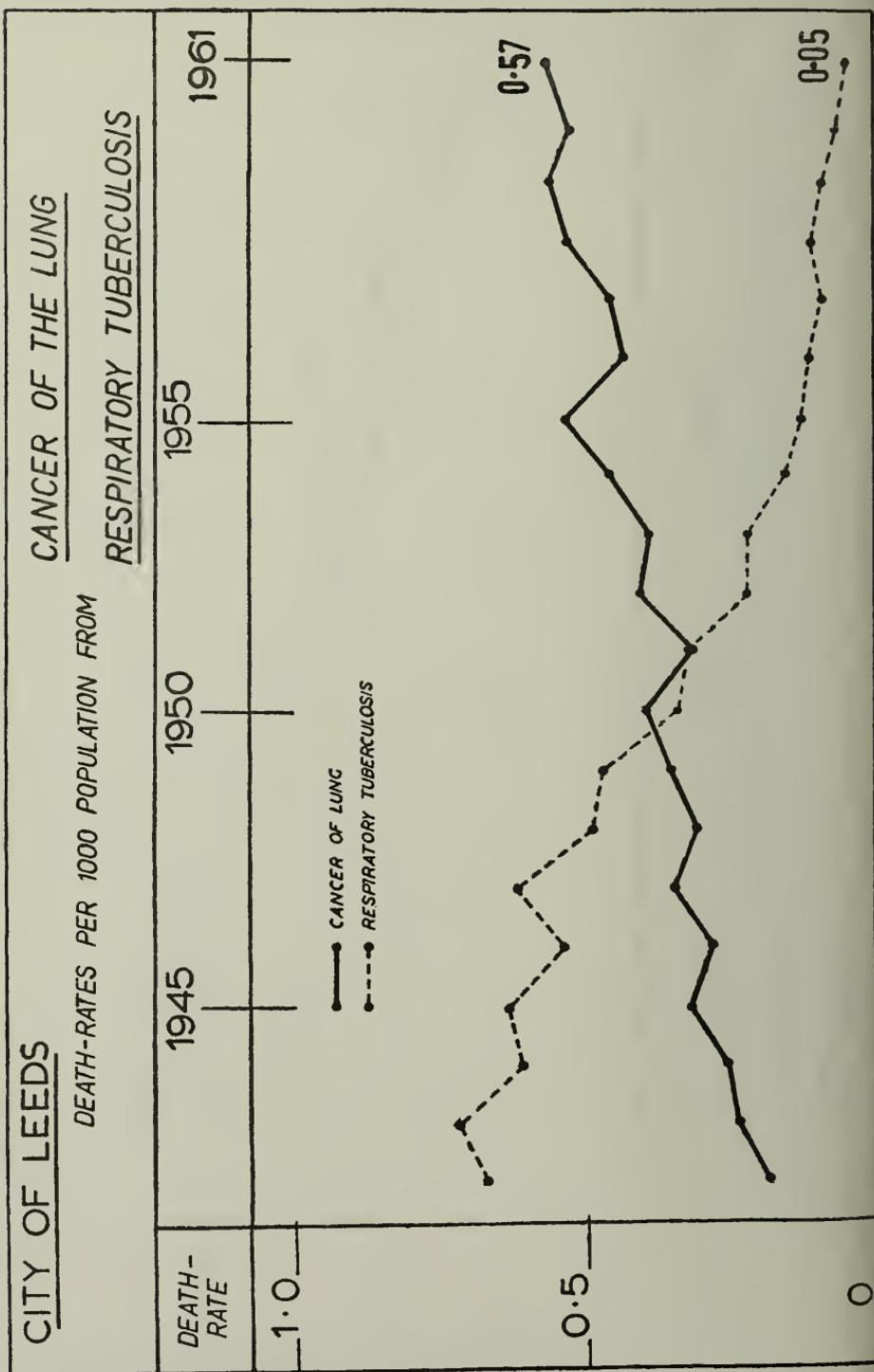
International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.											*Total Hospital Deaths in the District	
		All Ages	Under 1 year	1 & under 2 years	2 & under 5 years	5 & under 15 years	15 & under 25 years	25 & under 45 years	45 & under 65 years	65 & under 75 years	75 and upwards			
001-008	Tuberculosis, respiratory	28	..	..	..	..	..	4	16	3	5	25	
010-019	Tuberculosis, other forms	5	..	..	..	..	..	1	2	2	..	3	
020-029	Syphilitic disease	4	..	..	..	..	..	..	..	4	..	6	
055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	3	2	..	..	1	..	..	..	..	..	..	3
080	Acute poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	2
085	Measles	..	2	1	1	..	..	..	..	..	..	..	3
Remainder of 001-138	Other infective and parasitic diseases	..	12	1	..	..	1	..	3	4	1	2	20
	Malignant neoplasms:													
151	Stomach	..	..	..	..	..	..	6	49	39	44	84	
162, 163	Lung, bronchus	290	..	..	..	..	..	5	144	101	40	200	
170	Breast	..	..	..	..	..	..	6	54	36	19	78	
171-174	Uterus	..	..	..	..	..	..	3	35	16	8	49	
Remainder of 140-203, }	Other malignant and lymphatic neoplasms	..	498	..	1	2	2	1	30	175	146	141	432	
205	Leukaemia, aleukaemia	29	..	..	1	1	1	4	11	8	3	27	
204	Diabetes	..	25	..	..	..	..	..	5	6	14	20	
330-334	Vascular lesions of central nervous system	..	870	..	..	..	3	1	16	139	238	473	591
420	Coronary disease, angina	..	1,347	..	..	..	..	..	31	402	462	452	607
440-443	Hypertension with heart disease	..	..	..	..	..	..	..	..	15	29	47	29
Remainder of 410-443			91	..	..	..	..	..	..	..	..	..
410-443	Other heart disease	..	576	..	1	..	..	1	23	106	129	316	277
444-468	Other circulatory disease	..	274	..	..	..	..	..	4	55	65	150	167
480-483	Influenza	..	57	..	..	..	..	..	2	9	19	27	21
490-493, 763	Pneumonia	..	487	36	..	2	2	2	5	63	130	247	388	
500-502	Bronchitis	..	474	5	..	1	..	..	1	147	150	170	281
470-475 }	Other diseases of the respiratory system	..	32	1	..	..	..	..	3	10	9	9	30
510-527 }														
540, 541	Ulcer of stomach and duodenum	..	47	..	..	..	..	..	1	9	13	24	46
543, 571 }	Gastritis, enteritis and diarrhoea	..	37	6	1	..	..	1	1	3	6	19	39
572, 764	Nephritis and nephrosis	..	33	..	..	..	1	1	4	6	6	15	31
610	Hyperplasia of prostate	..	17	..	..	..	..	..	..	..	4	13	15
640-689	Pregnancy, childbirth and abortion	..	3	..	..	..	..	..	3	..	..	..	4
750-759	Congenital malformations	..	50	31	4	3	2	2	1	4	3	..	65	
Residual	Other defined and ill-defined diseases	..	530	118	..	5	6	5	26	96	96	178	549	
E810-E835	Motor vehicle accidents	..	104	..	1	2	12	25	22	21	7	14	101	
E800-E802 }	All other accidents	..	107	5	3	1	3	4	14	15	17	45	82	
E963														
E970-E979 }	Suicide	..	60	..	..	..	..	4	14	23	9	10	9
E964, E965 }	Homicide and operations of	..	6	..	..	1	1	..	2	1	1	..	1
E980-E999 }	War	..	..	..							
	Totals	6,413	206	12	18	35	48	235	1,619	1,755	2,485	4,285

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.

CITY OF LEEDS

DEATH-RATES PER 1000 POPULATION FROM CORONARY DISEASE





DEATHS IN AGE GROUPS (NETT), 1951-1961

Together with the percentage, of the total deaths, represented by each group
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1951	247	20	24	44	52	327	1,758	4,325	6,797
	<i>3·6%</i>	<i>0·3%</i>	<i>0·4%</i>	<i>0·6%</i>	<i>0·8%</i>	<i>4·8%</i>	<i>25·9%</i>	<i>63·6%</i>	
1952	231	20	32	25	38	327	1,560	4,059	6,292
	<i>3·7%</i>	<i>0·3%</i>	<i>0·5%</i>	<i>0·4%</i>	<i>0·6%</i>	<i>5·2%</i>	<i>24·8%</i>	<i>64·5%</i>	
1953	261	11	22	30	48	267	1,558	3,700	5,897
	<i>4·4%</i>	<i>0·2%</i>	<i>0·4%</i>	<i>0·5%</i>	<i>0·8%</i>	<i>4·5%</i>	<i>26·4%</i>	<i>62·7%</i>	
1954	198	13	19	28	30	273	1,546	3,648	5,755
	<i>3·4%</i>	<i>0·2%</i>	<i>0·3%</i>	<i>0·5%</i>	<i>0·5%</i>	<i>4·7%</i>	<i>26·9%</i>	<i>63·4%</i>	
1955	194	17	11	39	48	273	1,507	3,727	5,816
	<i>3·3%</i>	<i>0·3%</i>	<i>0·2%</i>	<i>0·7%</i>	<i>0·8%</i>	<i>4·7%</i>	<i>25·9%</i>	<i>64·1%</i>	
1956	216	17	17	22	39	263	1,488	3,700	5,762
	<i>3·7%</i>	<i>0·3%</i>	<i>0·3%</i>	<i>0·4%</i>	<i>0·7%</i>	<i>4·6%</i>	<i>25·8%</i>	<i>64·2%</i>	
1957	207	9	14	34	44	244	1,558	3,711	5,821
	<i>3·6%</i>	<i>0·1%</i>	<i>0·2%</i>	<i>0·6%</i>	<i>0·7%</i>	<i>4·2%</i>	<i>26·8%</i>	<i>63·8%</i>	
1958	218	11	16	26	38	249	1,512	3,862	5,932
	<i>3·6%</i>	<i>0·2%</i>	<i>0·3%</i>	<i>0·4%</i>	<i>0·6%</i>	<i>4·2%</i>	<i>25·5%</i>	<i>65·1%</i>	
1959	213	17	20	29	47	227	1,600	3,967	6,120
	<i>3·5%</i>	<i>0·3%</i>	<i>0·3%</i>	<i>0·5%</i>	<i>0·8%</i>	<i>3·7%</i>	<i>26·1%</i>	<i>64·8%</i>	
1960	199	11	26	30	44	221	1,517	3,743	5,791
	<i>3·4%</i>	<i>0·2%</i>	<i>0·4%</i>	<i>0·5%</i>	<i>0·8%</i>	<i>3·8%</i>	<i>26·2%</i>	<i>64·6%</i>	
1961	206	12	18	35	48	235	1,619	4,240	6,413
	<i>3·2%</i>	<i>0·2%</i>	<i>0·3%</i>	<i>0·5%</i>	<i>0·7%</i>	<i>3·7%</i>	<i>25·2%</i>	<i>66·1%</i>	

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	1960	1961	% of total deaths under one
010	Tuberculosis of meninges and central nervous system ..	..	..	..
Rest of 001-019	Tuberculosis, other forms ..	..	..	..
020	Syphilis ..	..	..	..
050	Scarlet fever ..	..	..	..
055	Diphtheria ..	..	..	..
056	Whooping Cough ..	..	..	..
057	Meningococcal infections ..	2	2	1·0
085	Measles ..	..	1	0·5
340	Meningitis (non-meningococcal) ..	3	2	1·0
480-483	Influenza ..	..	..	..
490-493	Pneumonia (4 weeks—1 year) ..	28	30	14·6
500-502	Bronchitis ..	3	5	2·4
560, 561, 570	Intestinal obstruction, hernia ..	2	3	1·5
571, 572	Gastro-enteritis (4 weeks—1 year) ..	4	5	2·4
751	Spina bifida and meningocele ..	9	13	6·3
754	Congenital malformations of circulatory system ..	15	8	3·9
750, 752, 753 }	All other congenital malformations ..	15	10	4·9
755-759 }	Birth injuries ..	21	18	8·7
760-761	Post-natal asphyxia, atelectasis ..	23	30	14·6
762	Pneumonia of newborn (—4 weeks) ..	4	6	2·9
763	Diarrhoea of newborn (—4 weeks) ..	1	1	0·5
764	Other infections of newborn ..	..	..	..
765-768	Hæmolytic disease of newborn ..	..	5	2·4
770	Other diseases peculiar to early	..	..	..
769 }	infancy ..	12	11	5·3
771-773 }	Prematurity ..	40	40	19·4
774-776	Accidental mechanical suffocation ..	1	2	1·0
E924	Other violent causes ..	4	3	1·5
Rem. of E800-999	All other causes ..	12	11	5·3
Residual	Totals ..	199	206	..

INFANT MORTALITY 1961. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

International List No.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total m'ths	-1 m'ths	-1 year	Total m'ths	-1 m'ths	-1 year
010	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
480-483	Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks—1 year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
500-502	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
560, 561, 570	Intestinal obstruction, hernia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
571, 572	Gastro-enteritis (4 weeks—1 year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
751	Spina bifida and meningomyelocele	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
754	Congenital malformations of circulatory system	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 750-759	All other congenital malformations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
760, 761	Birth injuries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
762	Post-natal asphyxia, atelectasis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
763	Pneumonia of newborn (—4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
764-768	Diarrhoea of newborn (—4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
770	Other infections of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
769, 771-773	Hæmolytic disease of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
774-776	Other diseases peculiar to early infancy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
E94	Prematurity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of E800-999	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
All other causes	Other violent causes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Residual	Totals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		83	14	10	6	2	4	4	4	3	2	132	30	26	8	10	206

INFANT MORTALITY DURING THE FOURTEEN YEARS 1948-1961 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE

YEAR	Births in year	Under one week		Under one month		One and under three months		Three and under six months		Six and under nine months		Nine and under twelve months		Under one year		
		Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	
1948	..	9,234	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	3.5
1949	..	8,447	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	3.0
1950	..	8,113	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	3.1
1951	..	8,044	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	3.1
1952	..	7,740	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	1.4	231	3.0
1953	..	7,932	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	1.4	261	3.3
1954	..	7,584	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	0.8	198	2.6
1955	..	7,630	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	2.5
1956	..	8,033	131	16.8	153	19.0	28	3.5	21	2.6	9	1.1	5	0.6	216	2.7
1957	..	8,429	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	0.7	207	2.5
1958	..	8,379	130	15.5	152	18.1	19	2.3	30	3.6	8	1.0	9	1.1	218	2.6
1959	..	8,353	130	15.6	149	17.8	22	2.6	24	2.9	7	0.8	11	1.3	213	2.5
1960	..	8,789	108	12.3	131	14.9	30	3.4	21	2.4	12	1.4	5	0.6	199	2.3
1961	..	8,921	123	13.8	132	14.8	30	3.4	26	2.9	8	0.9	10	1.1	206	2.3

VITAL STATISTICS OF LEEDS C.B. FOR 1961 AND PREVIOUS YEARS.

TABLE I.

YEAR	Population estimated to Middle of each Year	Births		TOTAL DEATHS REGISTERED IN THE AREA			TRANSFERABLE DEATHS			NETT DEATHS BELONGING TO THE AREA		
		Nett.		Number	Rate	Number	Rate	Of Non-residents registered in the Area	Of Residents not registered in the Area	Number	Rate per 1,000 Nett Births	Number
		Un-corrected Number	3									12
1	2	3	4	5	6	7	8	9	10	11	12	13
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	331	30	6,292	12.5
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
1957	510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4
1958	511,600	8,995	8,379	16.4	6,393	12.5	778	317	218	26	5,932	11.6
1959	513,300	9,045	8,353	16.3	6,481	12.6	787	426	213	25	6,120	11.9
1960	514,760	9,483	8,789	17.1	6,205	12.1	863	449	199	23	5,791	11.2
1961	511,650	9,769	8,921	17.4	6,835	13.4	919	497	206	23	6,413	12.5

Area of Leeds C.B.
in acres (land and inland water)
40,613.5

Total population at all ages at the 1961 Census 510,597 (preliminary)

• Population used for calculating vital statistics to allow for change in boundary.
† Mid-year population after change in boundary.

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS
DURING THE CALENDAR YEAR 1901.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED.												Total Cases removed to Hospital				
	At Ages—Years.																
	At all Ages		Under 1		1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and upwards		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Anthrax ..	2	..	..	..	..	2	..	..	1	..	..	1	..	..	..	1
Diphtheria ..	6	1	..	..	638	45	28	207	191	161	148	33	57	91	140	52
Dysentery	602	..	..	..	..	..	..	..	..	..	..	22	
Encephalitis, acute (Infective Post-infectious)	
Erysipelas	17	29	..	..	27	11	25	13	6	11	12	33	
Food poisoning	86	6	3	..	..	..	..	..	..	..	..	10	
Malaria	
Measles	4,124	3,976	189	174	2,352	2,194	1,564	1,591	11	12	8	5	
Meningococcal infections	5	1	..	1	..	4	..	..	1	..	..	..	..	..
Ophtalmia neonatorum	24	12	23	11	..	..	1	..	..	..	..	..	..	1	
Paratyphoid fever	
Pneumonia (acute primary)	302	226	23	15	37	13	20	6	14	11	33	33	93	49	
Pneumonia (acute influenzal)	40	34	1	..	1	..	1	..	2	2	5	3	24	12	
Poliomyelitis	9	11	..	1	1	1	4	4	2	4	2	1	..	..
Puerperal pyrexia	107	170	112	2	1	33	35	56	59	12	10	3	97	
Scarlet fever	1	..	
Typhoid fever	218	204	26	31	131	106	56	63	2	2	2	..	
Whooping cough	328	272	91	51	75	64	40	16	39	24	22	26	
Smallpox	
Non-notifiable diseases	
Totals	5,870	5,781	407	315	2,870	2,816	1,953	1,925	102	225	183	345	217	159	
Respiratory tuberculosis	288(26)	133(20)	18	..	1	3(1)	7(1)	12	6(1)	20(1)	28(7)	97(19)	83(10)	82(4)	21(1)
Other forms of tuberculosis	15(2)

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE II A. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1961.

NOTIFIABLE DISEASE	At all Ages												At Ages—Years.												Total Cases removed to Hospital	
	Under 1				1 and under 5 years				5 and under 15 years				15 and under 25 years				25 and under 45 years				45 and under 65 years					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Anthrax	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	
Dysentery	604	634	44	28	200	186	169	152	34	56	87	139	51	51	10	22	43	31	..	..	..
Encephalitis, acute	
Post-infectious	
Erysipelas	17	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Food poisoning	85	93	7	3	26	14	24	9	6	10	13	32	9	9	..	..	16	6	6	6	6	
Malaria	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	4,130	3,976	188	174	2,358	2,193	1,565	1,592	11	12	8	5	..	..	..	..	..	..	..	..	..
Meningococcal infections	4	3	..	1	4	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Ophthalmia neonatorum	24	12	23	11	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Paratyphoid fever	2	3	..	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..
Pneumonia (acute primary)	304	236	31	28	30	15	28	7	12	11	31	33	93	47	79	95	135	111	..	..	..
" (acute influenzal)	39	34	1	..	1	..	1	..	2	2	5	3	23	12	6	17	..	..	..	..	..
Poliomyelitis	1	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Puerperal pyrexia	170	..	..	..	..	..	..	..	..	73	..	97	..	..	..	..	..	..	..	..
Scarlet fever	107	108	2	1	34	35	56	57	11	8	3	4	1	3	..	..	..	..	15	8	..	
Typhoid fever	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	215	198	24	27	130	106	56	61	2	2	..	..	..	..	..	..	..	..	19	12	..	
Smallpox	
Non-notifiable diseases	335	284	87	41	78	66	52	44	23	48	29	24	31	23	35	38	335	284	..	..	..
Totals	5,870	5,781	407	315	2,870	2,615	1,953	1,925	102	225	183	345	217	159	138	197	647	530	..	..	..	..
Respiratory tuberculosis	238(26)	133(20)	..	..	1	3(1)	7(1)	12	6(1)	20(1)	28(7)	97(19)	63(10)	8(1)	2(1)	24(1)	7	149	62	..	..
Other forms of tuberculosis	15(2)	18	..	..	..	..	..	..	1	3	..	..	9	4(1)	2	..	3	2	5	..	..

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE II A. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.

NOTIFIABLE DISEASE	CITY	TOTAL ACCEPTED CASES												NOTIFIABLE DISEASE	CITY	TOTAL			
		Woolhouse	Motorown	Alerton	Roundhay	Ricchmond Hill	Potternewton	Burmanholt	Osmondthorpe	Cross Gates	Hallton	Beection	Hobibek	Hunslet	Cart	Hunslet	Bramley	Stanbridge	City
Anthrax	1
Diphtheria	12	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery
Encephalitis, ac. } Inf.
Encephalitis, ac. } P. Inf.
Erysipelas
Food poisoning
Malaria
Measles
Meningococcal infections
Ophthalmia neonatorum
Paratyphoid fever
Pneumonia (ac. primary)	16	19	19	16	8	11	13	13	14	20	16	27	25	11	23	21	29	68	305
" (ac. influenzal)	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis
Puerperal pyrexia..
Scarlet fever
Typhoid fever
Whooping cough
Smallpox
Non-notifiable diseases
Totals	..	190	457	394	277	223	588	505	519	599	826	522	496	477	422	246	383	415	315
Respiratory tuberculosis	..	7(3)	21(1)	12(2)	17(5)	13(4)	16(2)	16(5)	14	11	10(3)	13(5)	12(1)	22(2)	18(1)	12(1)	14	10(1)	8(2)
Other forms of tuberculosis	..	1(1)	3	2	1(1)	1	..	..	3	1	..	3	1	..	2	1	..	1	1

The figures shown in brackets are "Transfer in" Cases and are included in totals.

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33(2)

CITY OF LEEDS

VITAL STATISTICS 1920 - 1961

Year	Population	INFANT MORTALITY				STILL-BIRTHS			MATERNAL MORTALITY				DIARRHEA AND ENTERITIS			TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tub.)	DIPHTHERIA			SCARLET FEVER		MEASLES		WHOOPING COUGH		Year			
		Births	Birth-Rate	Deaths	Death-Rate	Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 total births	Peri-Natal Mortality Rate	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death-Rate per 1,000 live births	Deaths	Death-Rate	Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths					
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	5,459	148	..	100	1920
1	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	209	5	..	72	1
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	9,932	152	..	115	2
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	4,683	50	..	32	3
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	6,654	46	..	87	4
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	5,100	39	..	47	5
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	7,076	19	..	119	6
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	8,569	117	..	44	7
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	3,638	21	..	36	8
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	1,369	47	74	10	23	33	14.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	9,486	102	..	107	9	
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	42	68	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	913	2	..	32	1930	
1	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	48	71	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10,955	56	..	43	1	
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	45	71	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	3,540	52	..	41	2	
3	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	48	73	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	3,973	22	..	28	3	
4	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	43	67	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	10,576	90	..	25	4	
5	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	44	68	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	1,341	4	..	48	5	
6	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	42	63	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	8,744	49	..	28	6	
7	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	41	66	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	2,373	9	..	19	7	
8	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	41	63	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	11,172	1,717	8	6,797	18	..	13	8	
9*	(a) 497,000	7,079	14.2	6,535	13.4	401	57	30.2	307	42	62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	1,673	2	..	132	18	9
(b)	488,000	7,079	14.2	6,535	13.4	401	57	30.2	307	42	62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	1,673	2	..	132	18	9
1940	465,700	6,946	14.9	6,918	14.9	395	57	30.8	282	39	61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	..	4,364	8	128	2	1940	
1	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	39	55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	7,006	21	2,105	25	1	
2	462,400	7,204	15.6	6,090	13.2	369	51	29.7	278																								

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

G. E. WELCH, M.B., B.S., D.P.H.

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Deputy School Medical Officer.*

Measles was epidemic during 1961 and 8,106 cases were notified. Notifications of dysentery (mainly of the mild Sonne type) were again high. For some years the incidence of this disease has been on a high level despite energetic efforts to bring it under control. There was a sharp reduction in the number of cases of whooping cough, 413 as compared with 898 last year. Notifications of scarlet fever (215) were the lowest on record.

It is again a pleasure to record thanks to Dr. G. B. Ludlam and Dr. B. P. Marmion and their staff at the Public Health Laboratory for much help and advice, and also thanks to Dr. E. C. Benn at Seacroft Hospital.

Diphtheria.—No case of this disease occurred during the year. This is the sixth time since 1953 that no case has been recorded. During the past eight years only two cases of diphtheria have occurred in Leeds, one in 1958 and one in 1959.

Scarlet Fever.—The number of accepted cases of scarlet fever during the year was 215 as compared with 415 last year and 620 in 1959. This is the lowest number of cases ever to be recorded. Of the 215 cases, 23 (10.7 per cent.) were treated in Seacroft Hospital. The case-rate was 0.42 as compared with 0.81 for the previous year. The disease continues to be mild. There were no deaths.

Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.—No case of smallpox, typhus, plague or cholera occurred during the year. Three smallpox contacts were kept under observation as were one typhoid fever contact and five chronic typhoid carriers. During the year we succeeded in obtaining five consecutive negative faeces specimens from one of our known paratyphoidal faecal carriers (male aged 39 years) so he may now be considered free from infection.

There was one case of typhoid fever, a boy aged 11 years, and five cases of paratyphoid B. fever. The phage types in two of the paratyphoid cases were as follows:— Beccles var. 5 (male aged 64 years) and type 1 (male aged 47 years). Two cases (female aged 72 years and a girl aged 14 years) were untypeable, and the other case, a girl aged 10 years (sister of the girl aged 14 years) was a clinical diagnosis only, the case not being bacteriologically confirmed. In none of these cases was it possible to trace the precise source of infection. Five of the six cases were admitted to Seacroft Hospital. The male aged 64 years, although discharged from hospital in October, clinically well, was still excreting Para. B at the end of the year. Periodic specimens are being taken by this Department.

In the case of the boy suffering from typhoid fever, the following facts are of interest. He had attended a scout camp just outside the city boundary three weeks before the onset of the illness and it was thought that he might have contracted the infection there from a possibly polluted stream. Full details were passed to the Divisional Medical Officer of Health for the district concerned who made investigations at the camping ground and took samples of the stream water in question. No typhoid organisms were found in any of these samples and all other investigations proved negative. A few days after returning from camp the boy went on a day visit to Durham and had meals at two cafes during the journey. Information to this effect was forwarded to the Medical Officers of Health of the districts in which the cafes were situated.

Fæces and urine specimens were obtained from all the other boys in the troop and the scoutmaster who attended the camp. All these gave negative results. Similar results were also obtained from specimens taken from the boy's parents and other members of the family.

In addition, four symptomless excretors of Paratyphoid B. fever were discovered during the year. All were children, aged 3 months, 4 months and 4 years (2) respectively. The phage type in one case (female child aged 4 years) was Beccles var. 5; the other three were untypeable.

The two babies aged 3 months and 4 months were living in the same house but of different parents. The 4 months old baby was said to have had slight diarrhoea when about a month old but no-one else in the house had had any recent illness. A series of faeces and urine specimens taken from other members of the three households all gave negative results. Three of the four children were removed to Seacroft Hospital.

During the year 4 "other" cases were referred to the Department by medical practitioners for second opinions; these were visited and diagnosed as follows:—chickenpox (2), muscular rheumatism (1) and pharyngitis (1).

Measles.—This was an epidemic year for measles. The number of accepted cases was 8,106 as compared with 2,649 last year. Cases began to increase in October, 1960, and the outbreak reached its peak in April, 1961. The highest number of cases notified in any one week was 372 (week ended 15th April). Of the total cases, 154 were treated in Seacroft Hospital. There were 2 deaths.

Whooping Cough.—There was a considerable decrease in the number of accepted cases of whooping cough during the year, 413 as compared with 898 last year and 642 in 1959. Of the total cases, 31 (7.5 per cent.) were treated in Seacroft Hospital. There were no deaths.

Puerperal Pyrexia.—There were 170 accepted cases of puerperal pyrexia during the year as compared with 185 last year and 183 in 1959. Of the total, 149 (87.6 per cent.) occurred in hospitals and 21 (12.4 per cent.) in the practices of general medical practitioners and midwives. One case was treated in Seacroft Hospital. There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of ophthalmia neonatorum notified during the year was 36 as compared with 18 in 1960 and 16 in 1959. One case was treated in Seacroft Hospital. All cases recovered.

Erysipelas.—Accepted cases of this disease number 46, as compared with 49 last year. Of these, 6 (13.0 per cent.) were treated in Seacroft Hospital. There were no deaths.

Malaria.—One case of malaria was notified during the year. The patient, a male aged 28 years, was treated in Seacroft Hospital. He was a Greek subject and had probably contracted the infection in Greece before coming to England.

Anthrax.—One case of anthrax was notified during the year. The patient, a male aged 23 years, received treatment in a general hospital in the city and recovered. The necessary measures of disinfection were carried out by this Department. It is not definitely known how he came to be infected. He had, on a number of occasions, visited the house of a friend who is employed at a tannery in the city where a case of anthrax occurred in December, 1960, and it was on one of these visits that he was taken ill and removed to hospital. There was a suggestion that a leather coat which he had been wearing might have been the source of infection but this was examined with negative results. The patient, who was living in lodgings, was working for an engineering firm at Skelton Grange Power Station, Leeds. He was a manual worker, handling materials from demolished buildings and was unlikely to have had any contact with a possible source of anthrax in the course of his employment.

Dysentery.—The incidence of this disease continues to remain high. Accepted cases totalled 1,238 as compared with 1,180 in 1960 and 1,726 in 1959. There were two deaths, a male aged 39 years and a female aged 74 years. Both died in Seacroft Hospital. The cause of death in the former was :— 1a. Dysentery—Sonne, 2. Renal failure, and in the latter:— 1a. Acute toxic myocarditis, b. Dysentery (Sh. Sonne). Of the 1,238 cases, 1,182 occurred at home, 33 in hospitals and institutions and 23 in day nurseries. The number treated in Seacroft Hospital was 74, or 6·0 per cent. of the total.

Of the cases, 444 were Sonne and 13 Flexner, whilst the remaining 781 were not typed. Outbreaks of Sonne dysentery occurred in two day nurseries, accounting for 23 cases (all children). During the month of February an outbreak of Sonne dysentery occurred at a residential nursery in the city; 18 children and 2 staff were affected and 7 of the children were admitted to Seacroft Hospital. In the course of routine faecal testing one member of the staff was found to be a symptomless excretor of *Salmonella meleagridis*. All these cases were bacteriologically confirmed and all recovered.

Acute Poliomyelitis (including Polioencephalitis).—There were two accepted cases of this disease during the year (both paralytic) as compared with one in 1960. The patients were a male aged 26 years and a female child aged 5 months. The former was a prisoner in H.M. Prison, Leeds. He had been transferred there from Wandsworth Prison, London, on 26th October, 1961, and was notified as a case of paralytic poliomyelitis on 18th November. He was found at that time to be suffering from a foot-drop and although there was no very clear history of an acute stage of the disease it is thought that the actual onset took place a few days after his arrival in Leeds. The man had received two injections of poliomyelitis vaccine in August and September, 1961. The virological test gave a negative result. The five months old child was admitted to Seacroft Hospital on 18th November, 1961, suffering from paralytic poliomyelitis, onset 17th November, both arms and both legs being affected. She was still having treatment at the end of the year. The virological test in this case was positive (Type 1).

Cases and deaths for the past five years are as follows:—

Year	Cases	Deaths
1960	1	—
1959	11	—
1958	95	3
1957	41	1
1956	23	—

Individual case record cards on all notified cases of poliomyelitis were again forwarded to the Medical Research Council.

Acute Encephalitis.—No cases of acute infectious encephalitis or post-infectious encephalitis were notified during the year and no deaths were recorded.

Meningococcal Infection.—There were 7 accepted cases of meningococcal infection during the year as compared with 3 last year. Three of the cases were treated in Seacroft Hospital. There were 3 deaths.

Food Poisoning.—The number of accepted cases of food poisoning or suspected food poisoning during the year was 178, as compared with 209 in 1960 and 168 in 1959. Of the total, 48 proved to be *Salmonella* infections; of these, 12 were admitted to Seacroft Hospital. There were no deaths. The *Salmonella* organisms isolated were as follows:—

Salmonella typhi-murium	..	..	41
„ heidelberg	..	..	2
„ abony	..	..	1
„ bovis morbificans	..	..	1
„ give	..	..	1
„ menston	..	..	1
„ thompson	..	..	1
			—
			48
			—

During the year 16 persons were found on faecal testing to be symptomless excretors of *Salmonella* organisms, whilst 25 other persons gave faeces which were positive for *Salmonellae* not considered to be food-borne.

Included in the total cases of actual or suspected food poisoning were 120 cases which occurred in different households and which were bacteriologically negative. None of these cases required admission to hospital and there were no deaths. During the month of May, ten cases of suspected food poisoning were notified from an old people's hostel in the city. Those affected had slight diarrhoea only, which was of short duration and all soon recovered. Tinned pilchards eaten for tea were thought to have been a likely cause of the illness but no definite proof of this could be obtained. Faeces specimens were obtained from some of the patients and these were all negative for food poisoning organisms.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during the year was 7 as compared with 5 in 1960. The death-rates per thousand live births were 0.78 and 0.57 respectively.

Venereal Diseases.—The number of deaths assigned as due to venereal diseases was 4 which is equal to a death-rate of 0.008 per thousand of the population. The corresponding figures for 1960 were 2 and 0.004 respectively. For details of the work of the Treatment Centre at Leeds General Infirmary, see page 108.

Incidence of Blindness.—I am indebted to the Welfare Services Officer for the following statistical information regarding the admission of persons to the Register of Blind and Partially Sighted during the year.

A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS

(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D.8 recommends :— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment ..	21	6	..	66
(b) Treatment (medical, surgical or optical) ..	44	17	..	43
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment ..				27
29	16	..	..

B. OPHTHALMIA NEONATORUM

(i) Total number of cases notified during the year	36
(ii) Number of cases in which :— (a) Vision lost .. .. ..	..
(b) Vision impaired .. .. ..	..
(c) Treatment continuing at end of year .. .. ..	..

Malignant and Lymphatic Neoplasms.—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms. The total of 1,132 deaths in this group of diseases is 79 more than last year's total. The corresponding death-rate was 2.21 per thousand of the population.

Cause of Death*	Age Groups																		All Ages	Grand Total										
	-1		1-		2-		5-		15-		25-		45-		65-		75-													
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F												
Malignant Neoplasms:																														
Buccal cavity and pharynx (140-148)	4	4	4	1	1	1	9	6	15									
Oesophagus (150)	2	1	3	2	6	1	11	4	15									
Stomach (151)	4	2	37	12	20	19	21	23	82	56	138							
Other digestive organs (152-159)	4	4	41	30	34	41	21	43	100	118	218							
Trachea, lung and bronchus (162-163)	5	..	133	11	86	15	29	11	253	37	290							
Other respiratory organs (160, 161, 164, 165)	1	..	5	1	5	3	2	1	13	5	18							
Breast (170)	6	..	54	..	36	..	19	..	115	..	115							
Cervix uteri (171)	2	..	22	..	9	..	7	..	40	..	40							
Other parts of uterus (172-174)	1	..	13	..	7	..	1	..	22	..	22							
Male genital organs (177-179)	1	..	3	..	9	..	20	..	34	..	34							
Skin (190-191)	1	2	1	2	1	1	..	..	5	3	8							
Bone and connective tissue (196-197)	2	3	1	1	..	..	..	3	4	..	7							
All other sites	1	..	45	23	19	14	16	21	86	67	153							
(Rem. of 140-199)	1	..	27	27	281	187	190	156	121	134	626	506						
Total	1	..	3	..	2	1	1	27	27	281	187	190	156	121	134	626	506	1,132

*International List Numbers are shown in brackets.

Influenza.—There were 57 deaths from influenza during the year as compared with 2 in 1960. The death-rate per thousand of the population were 0.11 and 0.004 respectively.

During January and February an epidemic of Virus "A" Influenza occurred and the infection became widespread among adults, as shown by the increase in sickness absence. The disease was generally mild but pulmonary and cardiac complications were common in the elderly and were reflected in the increased numbers of

deaths due to influenza, pneumonia and bronchitis and the very considerable increase in deaths from all causes over a period of weeks.

Pneumonia.—Accepted cases during the year numbered 613, of which 540 (88.0 per cent.) were primary and 73 (12.0 per cent.) influenzal. The corresponding figures for 1960 were 558, of which 534 (95.7 per cent.) were primary and 24 (4.3 per cent.) influenzal. There were 487 deaths from all forms of pneumonia (including 6 deaths from pneumonia of the new born) as compared with 367 last year. The mortality rates were 0.95 and 0.71 respectively.

Bronchitis.—There were 474 deaths assigned to this disease as compared with 394 in the previous year. The death-rates were 0.93 and 0.77 respectively.

Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1961 was 2,693 as compared with 2,979 at the end of 1960, a decrease of 286.

Notifications.—During the year 371 cases of respiratory tuberculosis (of which 46 were transfers from other areas) and 33 non-respiratory (of which 2 were transfers from other areas) were notified, making a total of 404 cases of which 48 were transfers. Compared with the previous year there was an increase of 11 in the respiratory notifications and a decrease of 4 in the non-respiratory notifications. Compared with the average of the previous five years there was a decrease of 26 in the respiratory notifications and a decrease of 7 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.73, of non-respiratory 0.06 and of all forms of the disease 0.79 as compared with 0.70, 0.07 and 0.77 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 7.8 per cent. were children under the age of 15 years, 12.9 per cent. persons between 15 and 25 years and 79.2 per cent. were in the remaining age groups. The corresponding figures for the previous year were 11.9 per cent., 14.2 per cent. and 73.9 per cent. respectively.

With regard to the non-respiratory type of disease, 9.1 per cent. were children under 15 years and 90.9 per cent. were persons over 15 years. The corresponding figures for the previous year were 21.6 per cent. and 78.4 per cent. respectively.

Of the total cases, 231 were notified by the Senior Chest Physician, 15 were notified by general medical practitioners, 110 came from hospitals and 48 were transfers from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 14 (including 2 posthumous notifications) and the number of non-respiratory 6, making a total of 20, an increase of 4 as compared with the figure for the previous year.

Out of a total of 33 deaths from tuberculosis of all forms, one died within 7 days of notification and 3 died between 28 days and 12 months after notification.

The following tables give details of notifications of tuberculosis received during the year.

RESPIRATORY

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males...	...	3 (1)	12	20 (1)	50 (12)	47 (7)	39 (4)	43	24 (1)	238 (26)
Females	I	7 (1)	6 (1)	28 (7)	34 (7)	29 (3)	16	5 (1)	7	133 (20)
Totals	I	10 (2)	18 (1)	48 (8)	84 (19)	76 (10)	55 (4)	48 (1)	31 (1)	371 (46)

NON-RESPIRATORY

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	I	5 (1)	3	3 (1)	I	..	15 (2)
Females	..	I	..	3	8	I	I	I	3	18
Totals...	..	I	2	4	13 (1)	4	4 (1)	2	3	33 (2)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	I
Abdominal	I
Spine	I
Bones and joints	2
Skin	2
Lymphatic system	4
Genito-urinary system	4
Other sites
Totals	15
		I8	33

Deaths.—Deaths from all forms of tuberculosis during the year numbered 33 of which 27 were males and 6 females. In the previous year the total was 41 of which 29 were males and 12 females. Of the total, respiratory tuberculosis accounted for 28 or 84.8 per cent. and non-respiratory 5 or 15.2 per cent. The death-rate from respiratory tuberculosis was 0.05, from non-respiratory 0.01 and from all forms of the disease 0.06 as compared with 0.07, 0.01 and 0.08 respectively for the previous year.

Set against the average rates for the previous five years, the figures represent a decrease of 0.04 in the respiratory rate, no change in the non-respiratory rate and in the rate for all forms of the disease a decrease of 0.04.

RESPIRATORY TUBERCULOSIS
AGES AT DEATH

1961	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	7	7	7	23
Females	1	1	2	..	1	5
Totals	1	3	9	7	8	28
Average 10 years 1951-1960	2	9	13	16	18	20	78

NON-RESPIRATORY TUBERCULOSIS. DEATHS

1961	Tubercular meningitis	Abdominal	Bones and Joints	Other tuber- culosis	Total
Males	..	1	2	..	4
Females	1
Totals	..	1	2	1	5

AGES AT DEATH

1961	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	1	..	..	1	2	4
Females	1	..	1
Totals	1	..	..	2	2	5
Average 10 years 1951-1960	..	1	..	1	1	1	1	1	1	7

The following table gives details of notifications of and deaths from tuberculosis during the years 1939-1961:—

TUBERCULOSIS

YEAR	DEATHS						NOTIFICATIONS					
	Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis		Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis	
	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Cases	Case-rate	Cases	Case-rate	Cases	Case-rate
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25
1949	244	0.48	30	0.06	274	0.54	480	0.95	108	0.21	588	1.16
1950	178	0.35	15	0.03	193	0.38	521	1.02	98	0.19	619	1.21
1951	166	0.33	16	0.03	182	0.36	476	0.95	104	0.21	580	1.15
1952	113	0.22	10	0.02	123	0.24	476	0.94	97	0.19	573	1.14
1953	111	0.22	9	0.02	120	0.24	420	0.83	91	0.18	511	1.01
1954	83	0.16	4	0.01	87	0.17	470	0.93	80	0.16	550	1.08
1955	67	0.13	3	0.01	70	0.14	488	0.96	85	0.17	573	1.13
1956	56	0.11	8	0.02	64	0.13	484	0.95	62	0.12	546	1.07
1957	47	0.09	5	0.01	52	0.10	397	0.78	41	0.08	438	0.86
1958	54	0.11	2	0.00	56	0.11	365	0.71	21	0.04	386	0.75
1959	45	0.09	5	0.01	50	0.10	380	0.74	39	0.08	419	0.82
1960	35	0.07	3	0.01	38	0.08	360	0.70	37	0.07	397	0.77
1961	28	0.05	5	0.01	33	0.06	371	0.73	33	0.06	404	0.79

REPORT ON THE WORK OF THE TUBERCULOSIS
DEPARTMENT OF THE LEEDS CHEST CLINIC

BY

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Epidemiology.—*General.*—The statistics show that respiratory tuberculosis in Leeds behaves epidemiologically somewhat differently from the non-respiratory disease.

During the last 25 years the notification rate of **non-respiratory tuberculosis** has been reduced by 88 per cent. and the mortality rate by 91 per cent. The fall in the two rates has been closely parallel at all time intervals during the last quarter of a century. During the period the proportion of non-respiratory cases of tuberculosis to all forms of tuberculosis notified has become progressively smaller year by year, from 23 per cent. in 1941 to 17 per cent. in 1951 and to 8 per cent. in 1961, though the mortality rate of non-respiratory tuberculosis has been falling at a constant rate during the same period. Since 1954, non-respiratory tuberculosis deaths have been constant at about 3 or 4 deaths each year and notifications of new cases have been constant since 1957 at about 30 to 40 each year.

The fall in the mortality rate of **respiratory tuberculosis** has been more marked than the fall in the notification rate. This is not a new situation, for the mortality rate from all forms of tuberculosis is believed to have fallen steadily even before the discovery of the mycobacterium tuberculosis by Robert Koch in 1882. An acceleration in the fall of the death-rate from respiratory tuberculosis started before the last war and, although interrupted during the war and immediate post-war years, it was further accelerated by the introduction of specific anti-tuberculous drugs about 1950-52. Thus, in the ten years 1941-1951, the mortality rate from respiratory tuberculosis was reduced by over 50 per cent. and in the succeeding decade by a further 85 per cent. Although the mortality rate of respiratory tuberculosis has fallen rapidly since 1952, the notification rate has been practically constant since 1957.

Mortality of Tuberculosis.—Tuberculosis has become an uncommon cause of death at any age, particularly below the age of 45 in either men or women. More than 60 per cent. of deaths from all forms of tuberculosis occur in individuals above the age of 55. Men are not only more likely to develop tuberculosis than are women, they also account for 83 per cent. of all deaths from tuberculosis. In the last 25 years the mortality rate of tuberculosis has been reduced by nearly 95 per cent. Of the 33 tuberculosis deaths during the year, 28 (including one "transfer-in") were due to respiratory tuberculosis, 11 of them being sputum-positive at the time of death. Of 90 tuberculous patients who died during the year (see Table 1), it is important to observe that less than a quarter died from their tuberculous disease, the remainder dying from causes other than tuberculosis. The principal thoracic causes of death are given in Table 3 which shows that during the last 4 years the deaths from cancer, coronary artery disease and accidents have slowly increased. Deaths from bronchitis and pneumonia have also increased but prevalence of influenza may be partly responsible. On the other hand, deaths from tuberculosis have shown a steady fall in each of the years under review. Deaths from respiratory tuberculosis, cancer of the lung, bronchitis and, to a lesser extent, coronary artery disease, are principally causes of death in males of 45 years and over and are all known to be closely related to cigarette smoking. This is the real importance of cigarette smoking as a health hazard—that it is closely related to the cause of about 2,500 deaths, of whom 1,500 are in men over 45 years of age, in a population of half a million every year.

Notifications of Tuberculosis.—Notifications of all types of tuberculosis have been practically constant since 1957, or at least the rate of reduction in the previous five years has not been maintained. In the last 25 years the notification rate of respiratory tuberculosis has been reduced by 40 per cent., whilst for non-respiratory tuberculosis it has been reduced by 88 per cent. More men than women develop tuberculosis—in the proportion 5:3. But, in the first 25 years of life, more females than males develop respiratory tuberculosis also in the proportion 5:3. It is of interest to note that two-thirds of all the newly notified cases of non-respiratory tuberculosis occur either in the genito-urinary system or in the lymphatic glands.

As the tables show, the peak incidence in men occurs between 25 and 45 years of age and then slowly declines. However, as many new cases occur in men over 65 years of age as in those between 15 and 25 years. In women the notification peak occurs between 25 and 35 years of age, after which it subsides as rapidly as it increased in adolescence. Contrariwise, the mortality rate in women is constant at all ages from 25 to 65 years whilst in men it rises relatively rapidly from the age of 25 to a peak at 65 and over.

Prevalence of Tuberculosis.—Not only has there been a fall in the incidence and in the mortality rate from all forms of tuberculosis, but there is also a fall in the prevalence of known cases in the community. In 1961 there were about 5.5 cases of known tuberculosis per thousand of the population. In 1930 there were more than 10 known cases per thousand and the prevalence remained fairly constant for the succeeding 25 years. It now seems as though a decline in prevalence is possibly becoming manifest for the first time. Table 1 shows that about 18 per cent. of all cases of tuberculosis on the Register at 31st December, 1960, were classified as "Recovered" during the succeeding year. Patients lost sight of during the year represent only about 0.5 per cent. of the new cases notified during that year. These two factors are effective measures of the efficiency of the anti-tuberculous measures being employed. Since all patients with tuberculosis are retained on the Tuberculosis Register for at least 5 years after first reaching quiescence, the nearer the annual "Recovered Rate" is to 20 per cent., the more effective has been the previous management of the active newly diagnosed cases. Likewise, the fewer patients lost sight of, the more efficient has been the tracer and follow-up service, largely performed by the Health Visitors.

Primary Tuberculosis.—Table 4 demonstrates that the incidence of primary tuberculous disease remains constant. But so long as primary disease constitutes between 6 and 10 per cent. of all new cases diagnosed, so long must we be on the alert, for this relatively large proportion indicates the degree of infectivity in the population at large and is a measure of our failure to control this infectious disease. These figures give no cause for complacency, for tuberculosis is still running its natural course, modified only by our therapeutic measures in the treatment of the known active case.

Case Finding Methods.—Table 5 shows a steady increase in the proportion of new cases of pulmonary tuberculosis discovered each year and demonstrates that the relative values of the various methods remain reasonably constant.

Exclusion X-Ray Service.—From Table 6 it is clear that the Exclusion X-Ray Service is still much desired and is increasing year by year. More patients are attending the department but the proportion of cases found with active tuberculosis remains constant at about 13 per thousand examinations.

Welfare Services.—During the year under review, many individuals have been X-rayed prior to admission to one of the Local Authority's Old People's Homes. Table 7 shows that among 165 persons X-rayed, 6 cases of pulmonary disease were found; an incidence of 40 per thousand in the group. The greatest incidence of radiological abnormality occurred in individuals over 80 years of age. None of the 6 patients with radiological abnormalities had sputum-positive pulmonary tuberculosis at the time of diagnosis.

Mass Miniature X-Ray Service.—In 1961 about 18,850 individuals in Leeds attended the Mass X-Ray Service (see Table 8) and, of these, 18 were found with presumed active tuberculous disease, giving an incidence of just under 1 case per thousand. Out of 11,200 men examined, 16 were found to have pulmonary tuberculosis, an incidence of about 1.5 per thousand examined. It would therefore seem that, although mass X-ray techniques may possibly be of some value in investigating predominantly male populations, an incidence of 1 per thousand or less renders mass X-ray a most expensive method of finding new cases of tuberculosis.

Contact Examinations.—From Table 9, which briefly analyses the new contacts examined in 1961, it is observed that contact examination at the time of first diagnosis of the source case is often successful in finding new cases of tuberculosis, but that follow-up of contacts is not particularly fruitful when the source case has attained sputum conversion or is no longer in close contact with the original contact patients. The incidence of active tuberculous disease in contacts seen in 1961 was 14.6 per thousand, primary tuberculous disease accounting for nearly half of this. Table 10 analyses the work of the contact department in the Leeds Chest Clinic. As an example

of intensive contact examination, an employee at a secondary school in Leeds was found to be suffering with very extensive and infectious pulmonary tuberculosis. As a result, the girls and staff in the school were intensively examined. All the girls were over 13 years of age, and a total of 578 females were examined. Of these, 292 were Mantoux-positive and 286 Mantoux-negative. All the Mantoux-positive reactors were X-rayed and all had completely normal chest films. It may be that this can be explained by the fact that contact between the source case and the pupils was relatively slight; contact with the adult staff was closer but they were mainly already Tuberculin-positive.

Tuberculin Surveys and B.C.G. Vaccination.—*Contact Examinations.*—From Table 10 it is seen that over 50 per cent. of all contacts seen for the first time are Tuberculin-negative and of these practically 98 per cent. accept B.C.G. vaccination.

School Leavers.—Table 11 shows an analysis of the number of tuberculin reactors amongst school children carried out by the School Health Service. About 15 per cent. of all school children were Mantoux-positive at the age of 13 years, irrespective of the type of school they attended. The incidence of tuberculin positivity increased to 55 per cent. among the full-time students attending colleges and aged 16-18 years.

University Undergraduates and Staff.—Table 12 gives details of tuberculin-testing of students at the start of the Academic Year as part of the Annual Survey carried out by Dr. R. J. Still and his staff of the Leeds University Department of Student Health, with the assistance of the Chest Clinic staff. 1,491 individuals were tested with the Heaf test. 77 per cent. of the 750 men who attended for reading of the tests were Mantoux-positive and 72 per cent. of the 350 women were also positive. Only 75 per cent. of the Heaf-negative individuals attended for B.C.G. vaccination.

Health Visitors and Almoners.—As always, considerable and invaluable help has been provided in maintaining and implementing the various methods employed in the control of tuberculosis by the Health Visitors and Almoners. To them a debt of gratitude is due and our sincerest appreciation is paid. A report dealing with the work of the Almoner's Department of the Leeds Chest Clinic is given separately.

TUBERCULOSIS REGISTER

	Respiratory			Non-Respiratory			Total		
	M.	F.	Total	M.	F.	Total	M. & F.		
ON REGISTER AT 31.12.60 ..	1,523	1,090	2,613	166	200	366	2,979		
ADDED TO REGISTER :									
Cases notified in 1961 ..	212	113	325	13	18	31	356		
Transfer-in cases ..	26	20	46	2	..	2	48		
Cases returned ..	13	5	18	..	..	..	18
Totals ..	251	138	389	15	18	33	422		
TAKEN OFF REGISTER :									
Diagnosis not confirmed ..	1	6	7	..	..	..	7
Re-diagnosed N.R. to R. ..	..	..	..	..	..	..	..
Recovered ..	234	209	443	46	41	87	530		
Transferred-out ..	36	22	58	3	3	6	64		
Lost sight of ..	9	5	14	3	..	3	17		
Deaths from tuberculosis ..	18	3	21	1	..	1	22		
Deaths from other causes ..	50	15	65	3	..	3	68		
Register Revision ..	..	..	..	..	..	..	..
Totals ..	348	260	608	56	44	100	708		
Cases on register at 31.12.60									
plus cases added in 1961 ..	1,774	1,228	3,002	181	218	399	3,401		
Minus cases taken off 1961 ..	348	260	608	56	44	100	708		
Plus N.R. to R. ..	..	..	..	..	..	..	..
CASES ON REGISTER AT 31.12.61	1,426	968	2,394	125	174	299	2,693

(Table 1)

DEATHS OF CASES NOTIFIED IN 1961

No. of tuberculosis cases not heard of until time of death ..	..	Posthumous notifications	2	..	20
	..	Registrars' Returns ..	18	..	..
No. of deaths within 28 days of notification ..	..	..	..	..	4
.. .. deaths in other patients notified in 1961 ..	..	..	..	..	1
.. .. deaths in patients notified before 1961 ..	..	..	..	..	17

(Table 2)

PRINCIPAL THORACIC CAUSES OF DEATH

	1957	1959	1961	
			All deaths	Men 45+
Pulmonary tuberculosis ..	47	45	28	21
Cancer of lung ..	239	290	290	248
Bronchitis ..	423	500	474	323
Coronary artery disease ..	946	1,156	1,347	744
Pneumonia ..	270	463	487	201
Totals ..	1,925	2,454	2,626	1,537
All accidents (for comparison) ..	160	155	211	55

(Table 3)

INCIDENCE OF PRIMARY TUBERCULOUS DISEASE

Type of Tuberculosis	1958	1959	1960	1961
Respiratory (Total) ..	321	341	324	325
Primary pulmonary tuberculosis ..	19	26	30	22
Primary pul. tub. as % of total ..	5.9	7.6	9.3	6.8

(Table 4)

CASE FINDING METHODS

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations		
			1961	1960	1959
G.P. Letters ..	1,750	93	53	45	43
Exclusion X-ray Service	6,183	77	12	13	13
Routine X-Ray for other purposes ..	430	..	..	3	5
Contact examinations ..	3,664	28	8	11	6
M.M.R. ..	18,849	23	1.2	1.3	1.0
Total ..	30,876	221	7.2	6.7	4.9

(Table 5)

EXCLUSION X-RAY SERVICE DISCOVERY RATE

	1961	1959	1957
Total attendances ..	6,183	5,282	5,264
New cases of pulmonary tuberculosis ..	77	67	66
Ratio per 1,000 examinations	12.45	13	13

(Table 6)

WELFARE SERVICES GERIATRIC X-RAYS

Age-Groups	Nos. X-Rayed	Abnormal Films
60-69	21	1
70-79	80	..
80+	64	5
Totals	165	6

(Table 7)

MASS MINIATURE X-RAY SERVICE

Age-Groups	Nos. examined		Nos. with presumed inactive pulmonary tub.		Nos. with presumed active pulmonary tub.	
	M.	F.	M.	F.	M.	F.
0-14 .. .. ..			..	..	..	..
15-24			2	2	5	..
25-34			6	1	2	..
35-44			5	2	2	1
45-59			11	4	5	1
60+			7	7	2	..
Total by sexes	11,192	7,657	31	16	16	2
Grand total	18,849		47		18	

(Table 8)

NEW CONTACTS SEEN IN 1961

New Contacts seen	1,917
Tuberculin negative	982
Tuberculin negative given B.C.G.	968
Tuberculin positive	935
Tuberculin positive found with pul. tub.	27
Tuberculin positive found with pul. tub. with primary disease ..	13
Tuberculin positive found with pul. tub. with adult disease ..	14
Cases of pul. tub. found in all previous old contact cases ..	1

(Table 9)

WORK DONE IN CONTACT DEPARTMENT

	1960	1961
1. Nos. of contacts examined :		
(a) No. of new contacts seen	4,165	3,664
(b) No. of old contacts seen	1,963	1,917
2. Nos. of tuberculin positive contacts :		
(a) followed-up in Chest Clinic	3,540	3,106
(b) followed-up by M.M.R. Unit	3,112	2,682
	428	424
3. Nos. of tuberculin negative contacts :		
(a) No. given B.C.G. vaccination	1,053	982
(b) No. refused B.C.G. vaccination	1,037	968
	16	14
4. Nos. of cases of pulmonary tuberculosis discovered :		
(a) among new contacts seen for first time	45	28
(b) among old contacts under review	45	27
	..	1
5. Ratio per 1,000 of new cases of pulmonary tuberculosis discovered :		
(a) among new contacts	10.8	7.6
(b) among total contacts under review	25.2	14.6
	10.8	7.6

(Table 10)

B.C.G. SCHEME 1961

Type of School	No. tuberculin tested	No. read	No. tuberculin positive	No. tuberculin negative	No. given B.C.G.
Primary	1,489	1,400	16% 218	84% 1,182	1,182
County Secondary and Comprehensive ..	2,065	1,971	13% 261	87% 1,710	1,710
Secondary Modern and Technical	1,982	1,857	14% 269	86% 1,588	1,588
Colleges	264	234	53% 124	47% 110	110
Totals	5,800	5,462	16% 872	84% 4,590	4,590

(Table 11)

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF LEEDS (With acknowledgments to Dr. R. J. Still).

		Males	Females	Total
(1) No. of persons receiving Heaf Test	..	1,074	417	1,491
(2) No. of persons returning for Test reading	..	776	347	1,123
(3) No. of (2) Heaf Positive	.. ..	573	247	820
(4) No. of (2) Heaf Negative	.. ..	203	100	303
(5) Percentage of (2) Heaf Positive	.. ..	73.8%	71.8%	73.0%
(6) Percentage of (2) Heaf Negative	.. ..	26.2%	28.4%	27.0%
(7) No. given B.C.G.	.. .. ..	151	76	227
(8) Percentage of (4) given B.C.G.	.. .. ..	74.4%	76.0%	75.0%

(Table 12)

TUBERCULOSIS—SOCIAL WORK

BY

BARBARA M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

During 1961 the usual varied work of the Department was continued for tuberculous and non-tuberculous patients. 1,443 patients and their relatives were interviewed at the Clinic by the Almoner and 578 applications for assistance were made to the Special Services Committee. One pint of milk per day free of charge was supplied to 126 patients during the year.

Only four patients needed a bed and bedding on loan. Six loans of a mattress and bedstead were made to patients whose stocks of bedding were sufficient and one of a mattress only. Two bedsteads and mattresses and two single mattresses were provided for a patient and eight children whose beds were in a very poor condition. These bedsteads and mattresses had been a gift to the Department and were given outright to the patient. 16 loans of bedding were made to patients whose own supplies were not sufficient for their needs.

During the year 168 grants for clothing were made to patients and their families. The above grants were, of course, limited to tuberculous patients. Non-tuberculous patients in need of beds and bedding, clothing or extra nourishment, were referred to the Welfare Services Department or to voluntary organisations.

Co-operation with other Departments.—This continued unabated throughout the year and hearty thanks are extended to all those Departments which gave help and advice.

During the year 34 patients were recommended for convalescence; of these, 22 were non-tuberculous. Of the tuberculous patients, two were considered suitable for Shoreston Hall only. Unfortunately, this Home, the only one to take sputum positive or potentially sputum positive patients, ceased to do so in the middle of the year. This means that there is now no prospect of a convalescent holiday for any infectious or potentially infectious patient. 6 patients were referred to the Leeds Workpeople's Hospital Fund for convalescence.

Two patients living outside Leeds were referred to the Divisional Medical Officers of West Riding County Council; one wished to take advantage of a scheme run by his Trade Union and was referred to that body.

Only 6 patients were in need of home help during the year. One was a married woman with a large family and another an elderly lady living with an even elder sister. Two others were women patients living alone and the fifth a widow with a grown-up son. The only man on the list was married but his wife was also disabled and could not manage the heavier housework.

One request was made to the Care of Children Department for supervision of the family of a patient being admitted to Sanatorium.

Various requests for help were made to the Welfare Services Department. Furniture was provided for 6 patients who were either being rehoused, or whose furniture in their existing accommodation was inadequate. On two occasions the admission of elderly patients to sanatorium left in one case a husband and in the other a wife alone at home; as they were equally elderly and infirm, Welfare Services were asked to keep in touch with them. A patient whose wife had died and who could not afford funeral expenses was also put in touch with the Welfare Services Department as were other patients requiring accommodation. One patient was recommended for membership of a Handicapped Persons' Club.

During the year 12 applications for assistance were made to the Chief Education Officer. 8 of these were for clothing for the children of patients and the others were for school meals at reduced rates.

73 patients were referred to the Ministry of Labour for help in finding suitable employment. 13 of these were recommended for a course at the Industrial Rehabilitation Unit to assess their capabilities and to help them regain confidence in their ability to obtain and hold down a job after a period of illness. One patient who was already in employment was advised to apply for his name to be placed on the disabled register and another was recommended to change to more suitable work.

The Ministry of Pensions Welfare Department was asked to help a widow of the First World War, who had only 15/- left for food and other needs when her overheads were paid.

As always, the National Assistance Board provided help, temporary or long-term, as required, for patients whose income was insufficient to meet their needs. During the course of the year 183 patients were referred for allowances; 64 were new patients, ceasing work to take treatment and faced with an immediate drop in income, 8 had been under treatment for a time but had not previously been in financial need, 35 had just been discharged from sanatorium, 2 had been back at work and had then relapsed. 9 patients who had not given up work to take treatment, or who were already in receipt of an allowance from the National Assistance Board when their illness was diagnosed, were referred for an additional grant for extra nourishment. One retirement pensioner was referred for supplementation of his pension. 20 patients who were not suffering from tuberculosis were referred for the ordinary scale of allowance. 4 patients in sanatorium were helped to apply for an allowance. All were admitted to sanatorium straight from the Clinic and, as they had no source of income at all, they were referred for a pocket money allowance. The remaining 41 patients were in need of assistance for a variety of reasons, many because they had to cease work temporarily for a reason unconnected with their chest disease. Some needed help when they started work before their first wage fell due and some married women patients were in difficulties when their husbands were off work.

In 6 instances, investigation of a patient's affairs revealed relatives in the household, not supported by the patient, or who could no longer be supported by him owing to his illness, who were themselves eligible for assistance in their own right and they were helped to apply. 11 patients already in receipt of a weekly allowance in cash were referred to the National Assistance Board for grants in kind.

Voluntary Organisations.—Despite the many statutory provisions of the Welfare State, patients are still dependent on voluntary help on frequent occasions. Some needs arise which cannot be met through

statutory channels and, in other cases, the help from official departments still has to be supplemented if the family is to be adequately steered through the crises of illness and unemployment.

The Leeds Chest and Heart Association is the first bastion in the struggle to help a tuberculous patient in difficulty and has again responded readily to over 300 applications made to it during the course of the year. Its generous help is very much appreciated. As usual the majority of grants took the form of grocery orders to raise the patients' standard of living. Fares for relatives to visit patients in sanatoria came next.

Light and heat are necessities which became even more urgent when a sick person is in the house and the Leeds Chest and Heart Association also helped with gas bills, coal bills and the supply of coal over a period. Assistance was given as always with the cost of convalescence, removal expenses, curtaining and lino. Rent arrears were met, a wireless licence paid, spectacles repaired and debts settled. One rather unusual grant was towards the cost of a vacuum cleaner for an elderly patient living alone. The bulk of these grants were to tuberculous patients, but as the Leeds Chest and Heart Association is now able to help non-tuberculous patients, 19 applications were made on behalf of sufferers from other chest complaints.

The Leeds District Aid in Sickness Fund has also continued its valuable work for patients of the Clinic. 30 tuberculous patients and 18 non-tuberculous patients were helped by grants from this Fund during the year. The grants included payment of outstanding debts, provision of clothing and bedding, removal expenses, fares and convalescence. Miscellaneous grants included the refunding of lost money, supply of tools to a patient's apprentice son and the payment of advance rent on a new house. Two women patients were found by the health visitors to be in urgent need, with no food or fuel in the house, owing to their husbands' illness and resulting shortage of money. The Leeds District Aid in Sickness Fund paid bills which had mounted up and also gave immediate grants to buy food and coal.

The National Society for Cancer Relief was, as always, very ready to help any patients with carcinomas who were referred to

them. 9 grants for extra comforts were made; these continued in every case until the death of the patient. One dressing-gown was supplied and one grant was made for bedding.

The Royal Air Force Association helped a patient with business debts and the Royal Air Force Benevolent Fund paid rates for another patient.

The children of one patient were referred to the Soldiers', Sailors' and Airmen's Families Association for help with clothing and the British Legion was asked to consider helping another ex-service patient in financial difficulties. The Royal Artillery Association paid debts owed by a patient who was a former member of the Regiment.

The Women's Voluntary Service supplied clothing for 17 patients and their families and the Personal Service League was approached for clothing for another patient's child.

One elderly patient living alone was greatly inconvenienced when her vacuum cleaner was out of order as she was not well enough to clean the floors by hand. The makers of the cleaner were approached and on two occasions did the necessary repairs free of charge.

1961 was remarkable in that help was obtained for patients from several organisations which had never been contacted before. For the first time, the International Voluntary Service was called in to help patients with particular problems, e.g. an elderly couple who needed their new flat cleaned before they moved into it, an elderly man living alone whose flat was badly in need of decorating, and a patient who was not well enough to keep in order the garden of his Corporation dwelling.

One problem family was referred to the Family Service Unit. Leeds Lions were asked to provide transport for an elderly lady to visit her husband in sanatorium, which they kindly did. The Jewish Board of Guardians made a grant towards the cost of a vacuum cleaner for a patient in her late seventies who was having to do her cleaning by hand.

Another elderly patient had a bad fall when he went down into the cellar to put money in his gas meter. The North-Eastern Gas Board was asked whether it was possible to transfer the meter to the ground floor room. This could not be done but a different type of meter was installed so that the patient will now have a quarterly bill.

A patient living alone wished to apply for an almshouse and a request was made on her behalf to a Trustee of Potters Trust. Within a remarkably short space of time an offer was made and the patient is now settled in comfortable accommodation with which she is delighted.

The pattern of social work for tuberculous patients is gradually changing. At one time tuberculosis meant almost inevitably a very long illness, with often no prospect of the patient ever working and supporting himself and his family again. This entailed help over a period of many years, usually in the form of grants for nourishment, supplemented from time to time with *ad hoc* grants when some special need had to be met. Now many patients are back at work after a few months, but modern ways of living, which include obtaining necessities on hire purchase, leave a patient facing a burden of debt when his income from work ceases. Even if he is able to meet his existing commitments out of his reduced income, he cannot take on anything new and clothing, bedding and other extra necessities which arise cannot possibly be provided. It is frequently necessary to give massive help over a comparatively short period, but once the patient has been helped over this difficult time, he can manage for himself. It may be that the help has to continue until he can return to work but that again is now quite often a comparatively short space of time. One patient suffered the loss of £3 per week when he had to cease work to take treatment; his wife had budgetted the family income to the last penny and they had lived up to the limits of the money available weekly. Within five months, bills for rates, gas and electricity had been paid by the Leeds Chest and Heart Association and the Leeds District Aid in Sickness Fund, groceries and clothing had been provided for the wife and children at home, free milk had been supplied for the wife (who is also a patient), various debts had been paid off and correspondence with three other firms had resulted in a reduction in other weekly payments. Although the total amount of money raised for this one patient and his family

may seem a lot, it is actually no more than would have been spent formerly on a chronic patient during years of ill-health, and it has the effect of keeping up the patient's standards and morale, freeing him from the fear of Court proceedings and contributing to his recovery.

General.—The Almoner lectured to groups of health visitor students and district nurse students during the year and spoke on the work of the Department to two women's church groups. The Department was visited by officers of the Ministry of Labour and the National Assistance Board. The Almoner attended meetings of social workers on the work of the Citizens Advice Bureau and on prison welfare.

As in previous years, the Leeds Chest and Heart Association provided 100 bags of coal for elderly patients and patients living alone; the Leeds District Aid in Sickness Fund gave 9 food parcels. Donations from well-wishers provided a further two parcels. The Leeds Workpeople's Hospital Fund and the *Yorkshire Post* made a generous gift of toys and books for the children of patients. 197 children received a Christmas gift and their pleasure and that of their parents brought the year to a close in a thankful and joyful spirit.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., F.R.E.S.
Disinfestation Officer.

The Disinfestation and Disinfection Section of the Department is situated at Stanley Road, Harehills.

The Centre is made up by a number of buildings: an administration block housing high pressure and low pressure disinfection plant with laboratory and offices in one unit, a clinic building for the treatment of pediculosis and scabies conditions, with facilities for the cleansing of neglected cases and containing a lecture room for educational purposes; a large hydrogen cyanide plant, an insecticide store with mixing plant, a modern boilerhouse for the production of steam for sterilisation and heating purposes, and garage accommodation for the twenty vehicles serving the Centre.

The Disinfestation Officer has four Assistant Officers each responsible for his sub-section:—(a) General Disinfestation, (b) General Disinfection, (c) Maintenance and Cleansing of Public Conveniences and (d) Drainage and Public Sewer Flushing.

Personal Disinfestation.—This Section, housed in the Clinic block, is supervised by a State Registered Nurse who is assisted by one male and two female attendants. The Clinic Building has at one end of it a section for the treatment of *pediculus capitis*. During 1961 1,769 persons were given 1,795 treatments, 1,593 being children of school age and below. In connection with these cases 1,512 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are qualified nurses. Close collaboration was maintained with the School Health Service.

The other end of the Clinic building is designed for the treatment of *pediculus corporis*, *phthirus pubis* and scabies cases. Cases of *pediculus corporis* number 472 and by far the greater proportion of these were vagrants. A number of persons coming within the

definition of the National Assistance Act, 1948, Section 47, in need of care and attention and usually in a dirty and verminous condition were cleansed and disinfested before their admission to a Welfare Home or to a hospital. In this instance, close collaboration with the Welfare Services Department enabled the scheme to run smoothly.

During the year 459 persons were treated for scabies, of whom 166 were of school age and under, 294 contacts received prophylactic treatment and a total of 429 homes were visited. These cases are referred for treatment by the Skin Department of the Leeds General Infirmary and by general medical practitioners. There were only 14 cases of *phthirus pubis*.

General Disinfestation.—This sub-section is supervised by an assistant officer and has six house disinfection operators and one hydrogen cyanide operator.

When, in 1934, slum clearance and the consequent removal of slum dwellers to the newly constructed Corporation housing estates brought this city into the limelight in relation to hydrogen cyanide fumigation, the bed-bug infestations encountered were severe and extensive and the costs of disinfection high. Today, although the incidence of bug infested houses, prior to vacation, is still high, the infestations are extremely light and the use of hydrogen cyanide fumigation is no longer necessary in this connection. In collaboration with the Housing Department, 1,102 (1,702 in 1960) dwellings were subjected to spray treatment, using a synthetic insecticide in solvent form. Half of this number, i.e. 551 dwellings, were bug-infested slum properties with their contents and the other half Corporation houses sprayed prophylactically to receive the slum dweller. This scheme worked exceptionally well. It speeded up the transfer of tenants from the verminous slum houses to the Corporation houses thus considerably reducing the time the latter stood empty, avoiding loss of rent to the Housing Department. This speeding up was only possible with the co-operation of the Resident Housing Managers of the widely separated estates in the city and the direct contact made with the in-going tenants. All of these were visited, the houses inspected and where found verminous, arrangements were made for disinfection before removal. In this connection alone, 1,203 (1,511 in 1960) visits were made.

Re-infestation of Corporation houses sprayed during the year to receive verminous tenants does not occur within that period, but 47 Corporation houses not so sprayed during the previous twelve months became infested or re-infested by bed-bug, mainly because of the introduction into the house of some second-hand article of furniture or bedding which had been purchased in a verminous condition privately or from some second-hand dealer.

The problem of bed-bug infestation and disinfection in re-housing is practically non-existent; as already stated, such infestations are light and therefore easily eradicated. Instead, woodworm infestations are considered to be of equal importance. Such infestations are not a matter of public health but they are tremendously important as far as the economics of housing management are concerned. An infestation introduced can soon become widespread with little evidence of its presence in its early stages, and control or eradication is difficult. It is, therefore, now the practice when investigating houses prior to the transfer of the tenant to the Corporation house, to pay attention to the possible presence of woodworm in the structure or, more important, in the furniture of the slum house. Where woodworm is found in the furniture of such tenants, a hydrogen cyanide fumigation process is insisted upon and carried out at the time of removal of the tenant to the Corporation house.

Because of this problem of woodworm disinfection, the hydrogen cyanide plant, originally created for bed-bug eradication, is retained though reduced to half its former capacity. Should a woodworm infestation be found on inspection of the slum house and its contents, the latter are removed by means of a container gas van to the Disinfection Centre. At the Centre the furniture is subjected to hydrogen cyanide fumigation and then delivered to the Corporation house some two days later. Subsequent inspections have proved that the woodworm has been eradicated and the danger of an extension to the structural timber of the Corporation house removed. During the year 314 articles of furniture were fumigated by hydrogen cyanide and 13 removals were carried out in this connection.

Apart from this work of disinfection in relation to the re-housing process, insect pest control of Corporation dwellings has been maintained. Working in close collaboration with the Clerks of Works of the Housing and Works Departments and the Resident Housing Managers of the various estates, infestations by woodworm, cockroaches, steam-fly, red spider, golden spider beetle, etc., have been controlled and in most instances wiped out completely. Requests for woodworm disinfection have continued steadily and the first signs of a commencing infestation are usually reported promptly. The latter occur usually on estates which are bounded by woods and plantations. Dead timber in a plantation soon becomes infested and a favourable wind could very easily send an emerging swarm to the adjoining estates of houses, where they enter by open windows, air-grates or by way of the eaves to the roof space. 72 treatments for woodworm were carried out in Corporation houses. Such treatments were arranged to coincide with works of maintenance: infested timbers were replaced by treated timber and easy access to sub-floor and roof spaces was prepared for subsequent spray treatments which are arranged to cover a period of three years. One application each year is given, usually in March/April.

The golden spider beetle (*niptus hololeucus*) was found to infest 11 requisitioned Corporation houses, all of which were being converted into flats. Infestations having been discovered as soon as works of conversion had commenced, disinfection was much easier and by the time the flats were ready for occupation, the infestation had more or less been eradicated.

The red spider or clover mite continues to prove a nuisance especially in the more recently erected Corporation houses. Such infestation is an infestation of the site rather than that of the house, but the protection from the weather and the warmth on the south side that it offers, attracts the mite. Control measures are successful but not immediate.

The window fly (*anisopus fenestralis*) sets a problem in the early part of each year. It is quite content to stay and complete its life-cycle on the filter beds of the sewage works but it readily becomes wind-borne and is then carried in the wind direction as far as two

miles from its normal habitat. Numerous control measures have been tried and experiments continue in the hope that the nuisance can be effectively controlled very soon.

In addition to the regular disinfection programme carried out for the Housing Department, other Corporation Departments have taken advantage of the facilities offered by the Disinfection Section. The death-watch beetle appears to have been wiped out at Swinsty Hall. No beetles were discovered after a careful inspection. Treatment, by twice yearly spraying, commenced in 1952: thus it has taken eight years to eradicate this pest. During this period there were no further extensions of the infestation, and the beetles which were found in a comatose and paralysed condition became less in number each year.

Outbreaks of woodworm in school furniture and in the structure of some of the schools, old and new, continue to occur and are dealt with on instructions from the Education Committee. *Lyctus brunneus* (powder post beetle) has been found in recently laid floors of the new schools, but the prompt application of insecticide after removal of the polished surfaces put an end to the infestation, the life-cycle of which rarely exceeds twelve months.

As already mentioned close collaboration with the Welfare Services Department in connection with geriatric cases has been maintained. In addition to the treatment of the aged persons in the Clinic, their homes have to be disinfested. It is usual to empty their contents into gas container vans and, after hydrogen cyanide fumigation, send them on instructions of the Welfare Services Officer to the saleroom for disposal by auction. The verminous dwelling having been cleared is then given a spray treatment before the keys are returned to the owner or his agent.

Both Leeds Hospital Groups and the United Leeds Hospitals continue to entrust their disinfection programme to the Disinfection Section. Cockroach, steam-fly and ant control is carried out at regular intervals and outbreaks of fly infestations, especially at St. James's Hospital, have been investigated. The latter are usually traced to a nearby tip and with the co-operation of the Cleansing Department, steps are taken to prevent further outbreaks by increasing the efficiency of controlled tipping and the application

of powder insecticides to the surface of the tip. The disinfection facilities of the city have also been extended, when applied for, to private firms, property owners and the general public. These works include the disinfection of verminous bedding, woodworm infested furniture and structures, bug infested dwellings, cockroach and steam-fly infested hotels and restaurant kitchens and control of and precaution against infestation by clothes moths.

A number of outside authorities continue to use the facilities offered by the Disinfection Section, mainly in relation to woodworm control and bed-bug eradication. Relative short distances from the Disinfection Centre enable the proposition to be economic.

Methods of disinfection vary according to the type and degree of infestation. D.D.T. in kerosene with pyrethrum added remains effective in the field of bed-bug infestation. Benzene hexachloride (BHC) in odourless distillate is used in connection with pharaoh's ants, steam-fly and other infestations in places where food is prepared or stored and where the absence of smell of the insecticide is of the greatest importance. BHC continues to be very effective against woodworm by its application once yearly over a period of three years and hydrogen cyanide is an excellent ally in this campaign and in that against moth infested textiles. Xylamon, a German product, has been found excellent in use when dealing with dry rot infestations and with woodworm outbreaks in roof spaces or where the timber is in its rough state. Apart from these, several powders including DDT, BHC and Malathion have their specific uses.

Low pressure steam is used for the disinfection of clothing, bedding and textiles generally, and the Thresh Low Pressure Current Steam Disinfectors answer to this purpose admirably. The volume of work is quite heavy: in connection with the rehousing programme 8,962 articles were disinfested, in connection with occupied Corporation properties 720 articles and for work carried out for other purposes 6,275 articles. No complaint of damage to articles was received during the year, which confirms the efficiency of the machine and pays tribute to the steam operators who handle them.

General Disinfection.—This sub-section is supervised by an assistant officer in whose charge are four steam operators who manipulate one High Pressure Current Steam Disinfector and two Low Pressure Current Steam Disinfectors. Part-time assistance in this Section is obtained from the male nurse of the Clinic Staff, who supervises the Package Steam Boiler installed in May, 1960. There are also two bedding van personnel, and a general stores vehicle with driver and attendant, who are engaged on departmental transport, including the delivery of stores, etc.

Disinfection carried out during the year has been mainly in connection with cases of tuberculosis, either where a patient has gone to a sanatorium or where he and his family have been rehoused or a death from the disease has occurred. Other disinfections concerned outbreaks of dysentery, and cases of acute anterior poliomyelitis. In connection with the former, several schools required special attention. School toilets were visited twice daily and their appliances thoroughly disinfected until the outbreaks subsided.

Medical Loan Requisites were distributed in collaboration with the Chest Clinic and disinfected after collection and before re-distribution. The articles loaned included blankets, sheets, pillow-cases, bedsteads and mattresses. 109 homes were visited, 359 articles delivered involving 645 miles transport.

In connection with infectious diseases, 240 houses were visited, 433 rooms were disinfected by formaldehyde, 202 beds and 15,486 articles were disinfected by steam.

Steam disinfection is confined to one high pressure steam disinfecter and is used for bacteriological disinfection of articles which can tolerate the high temperature and pressure. The steam for this purpose is obtained from the oil-fired boiler plant installed last year, and which is fully automatic. Constructed by Messrs. Ruston and Hornsby Ltd., of Lincoln, it is of the economic type with single flue and two sets of fire tubes, making it a triple-pass boiler. The boiler is designed for the evaporation of 1,800 lbs. of steam per hour and it has a working pressure of 100 lbs. per sq. in.

Apart from supplying the necessary steam for the H.P. disinfectors and the two Low Pressure Current Steam Disinfestors, the steam is also used for providing hot water and heat for space heating of offices, stores, garages, etc.

In the early part of the century disinfection plants were built alongside refuse destructors because of the ready availability of waste heat and its use for the production of steam. Today, the calorific content of household refuse is so low that it is no longer economically possible to produce steam this way. Because of this factor, the new plant was provided. Producing an average of 26,000 lbs. of steam per week, at an approximate cost of $\frac{1}{8}$ d. per lb., the new boiler is more economic and requires far less supervision than the waste boilers.

For all other purposes, formaldehyde disinfection is used. It is generated by atomising to 4 micron size aerosols, a 30 per cent. strength of formalin from a special aerosol machine. The formalin behaves as a vapour with considerable powers of penetration and the process is eminently suitable for space and surface disinfection. Used in an airtight chamber with a relative humidity of not less than 60 per cent., complete disinfection of articles, not suitable for steam disinfection, is achieved after six hours exposure. Where formalin has been found to be too severe, propylene glycol has been used for air disinfection. There are no irritating effects from this disinfectant and the room so treated can be used soon afterwards.

Chlorinated phenols, such as Dettol, Ibcol, etc., and white and black disinfectant fluids, the latter to British Standards 2462: 1954, complete a formidable array of disinfectants used at the Centre.

Transport.—The distribution of food supplements and stores to Infant Welfare Centres and Day Nurseries was continued during the year. One stores van was maintained for these purposes and completed 9,536 miles.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs, spinal carriages, mattresses, etc., which are stored at the Centre. During the year,

368 visits involving a total of 2,119 miles were made and each chair and carriage was thoroughly cleansed, disinfected, inspected and repaired, where necessary, before distribution.

With the adaptation of the HCN garage, providing a floor of approximately 120 sq. yds. area, departmental storage difficulties have been overcome and storage space is provided for surplus furniture, from discontinued Day Nurseries, Nurses' Homes, etc., available for re-use, if and when the occasion demands.

Incontinent Laundry Service.—This is now well established and is limited to a maximum number of 40 patients per day. The service has been found to be a great help in the problem of home nursing patients suffering from incontinence. The latter were visited daily and four clean draw sheets per patient exchanged for the previous day's soiled linen.

A specially designed laundry van is used for this purpose and during the year, an average number of 40 patients per day received attention. A total number of 9,524 visits were made, involving 17,102 miles travelled.

The laundering was carried out at the South Lodge Laundry by arrangement with the Welfare Services Committee, and included the repair of the sheets. The excellent co-operation of the Laundry Manager ensured a smooth running of the service; not always easy when the number of sheets fluctuated, especially at holiday periods.

Public Conveniences.—This sub-section is supervised by an assistant officer and there are three squads, each consisting of two men with a motor vehicle carrying equipment for flushing and cleansing the conveniences.

Three newly designed public conveniences were constructed during the year, situated at North Lane, Headingley, at Halton near the Irwin Arms and at Seacroft, at the side of the Green.

A similar number of public conveniences were closed, situated at Cherry Row, Rockingham Street and Ley Lane. The former two were involved in the redevelopment of sites and the latter had become redundant.

The three squads are responsible for the general maintenance and cleanliness of the city's conveniences. There are altogether 74 unattended conveniences for males and females situated in 54 locations throughout the city: 28 of these locations are within a mile and a half radius from the city centre, 12 are between one and a half and two miles and 14 are over two miles from the city centre. The locations of the unattended conveniences comprise 31 for males only, one for females only and 22 for males and females. There are 53 conveniences for males and 23 for females.

Attended conveniences number 5 in the centre of the city, three for males and females, one for males only and one for females only. There is also a convenience for both sexes at Cross Gates which is attended for certain hours of the day only.

Cleanliness of the unattended public conveniences is controlled by daily visits made by the three squads. During the year a total of 22,231 visits were paid to the conveniences, both male and female. About 75 per cent. are cleansed each week-day, and, in addition, those situated in the centre of the city are cleansed on Sundays.

The flushing squads report defects and structural damage to the supervising Officer-in-Charge. These reports are checked and the necessary repair work is ordered from the Works Department, a scheme which avoids unnecessary delay in getting repair work executed, an important factor in the satisfactory maintenance of public conveniences. The five attended public conveniences are visited by the Supervising Officer regularly and the same procedure adopted.

At six conveniences major improvements were carried out; new stalls replaced worn and offensive ones and electric lighting was substituted for gas. 20 unattended and 6 attended conveniences were provided with small wash-hand basins with a spring valve to the cold water tap.

Wilful damage in unattended public conveniences must be deplored. No less than £401 5s. 7d. (1960—£242 12s. 4d.) had to be spent to make good the loss by theft of lock boxes, copper and lead piping and by the wanton destruction of urinal stalls, water closet

basins and wash-hand basins. Of the 20 small wash-hand basins provided in unattended public conveniences, as already described, 10 of the fireclay basins were so damaged as to require replacement within a short time of fixing, and in a number of conveniences the basins have been replaced for a second and a third time.

Whereas most of the wanton damage must be attributed to irresponsible youths and to hooliganism, the theft of piping and fittings and of lock boxes is, no doubt, the target for criminal adults. The lock boxes have been, in a number of instances, forced open or entirely removed from the doors and stolen : it is difficult to understand the motive in these cases, as the boxes are emptied daily and contain a few coppers only.

The fitting of these lock boxes of the penny-in-the-slot type has proved to be a deterrent in the past against wilful damage, especially by children, but the cost in repair and in replacement of the damaged and stolen boxes makes their deterrent value almost uneconomic.

The maintenance of automatic electrical switchgear and emergency repairs are done by a squad of two men, trained by the City Lighting Department. Inspections are carried out daily, and this service prevents accidents when lighting fails, especially important when a public convenience is below ground level and reached by a flight of steps. During 18,558 visits paid 398 lighting repairs were effected.

Public Sewer Flushing.—This sub-section is supervised by an assistant officer with two squads of drainage flushers, equipped with motor vehicles and the necessary appliances such as flushing drain rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. These squads work under the direction of public health inspectors in connection with (i) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (ii) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (iii) the removal of stoppages from drains and (iv) the pumping out of flooded cellars, inspection chambers, etc.

This service is available to other Corporation Departments, especially to the Housing Department, the City Engineer's Department, the Markets Committee, the Parks and Cemeteries Department, to private contractors and property owners. Contract work for the regular cleansing of drainage systems of private schools, several banks and some of the larger firms has been undertaken. Whereas the cost of cleansing of public sewers is a charge upon the Health Committee, the cost of all other works of cleansing, investigation and pumping has been recovered from the ordering body.

The demand for this specialised work is continually increasing; indeed there are some days when the time-table of the squads are completely booked several days ahead. Because of its nature, some of the work can only be carried out on Sunday mornings or after business hours, therefore some overtime is unavoidable. During the year, 1,076 (1,001 in 1960) public sewers were cleansed and the number of private drains tested and/or cleansed amounted to 34,071 (34,232 in 1960).

By the establishment of this service the Health and Housing Committees have effected a substantial saving in the cost of public sewer cleansing and other drainage investigations; there has also been a saving in time, stoppages having been cleared in most instances the same day that they have been brought to the Section's notice.

DISINFESTATION CENTRE
REPORT OF WORK DONE FOR YEAR 1961.

I. DISINFESTATION

A. WORK CARRIED OUT AT REQUEST OF HOUSING DEPARTMENT

(a) Re-Housing

No. of visits of inspection .. 1,203
 No. of dwellings disinfested by insecticide.. 1,102
 No. of articles disinfested by steam 8,962
 No. of articles disinfested by HCN —

	Bed Bugs	Wood-Worm	Niptus	Others	Total
No. of visits of inspection .. 1,203					
No. of dwellings disinfested by insecticide.. 1,102	1,102	13	—	—	1,115
No. of articles disinfested by steam 8,962	—	—	—	—	8,962
No. of articles disinfested by HCN —	314	—	—	—	314

(b) General

No. of visits of inspection .. 94
 No. of dwellings disinfested by insecticide.. 47
 No. of articles disinfested by steam 590
 No. of articles disinfested by HCN —

No. of visits of inspection .. 94					
No. of dwellings disinfested by insecticide.. 47	47	72	11	115	245
No. of articles disinfested by steam 590	590	—	—	130	720
No. of articles disinfested by HCN —	—	—	—	—	—

B. WORK CARRIED OUT FOR OTHER SOURCES

No. of visits of inspection .. 229
 *No. of premises disinfested by insecticide.. 135
 No. of articles disinfested by steam 1,837
 No. of articles disinfested by HCN 1

No. of visits of inspection .. 229					
*No. of premises disinfested by insecticide.. 135	135	50	2	703	890
No. of articles disinfested by steam 1,837	1,837	—	—	4,438	6,275
No. of articles disinfested by HCN 1	1	167	—	82	250

*For Outside Authorities 12 *For Leeds 878

2. TREATMENT OF VERMINOUS PERSONS

(a) Pediculus Corporis

No. of homes visited — — 4
 No. of persons treated 12 460 472

(b) Pediculus Capitis

No. of homes visited.. — — 1,512
 No. of persons treated 1,593 176 1,769
 No. of treatments involved 1,596 199 1,795

(c) Scabies

No. of homes visited — — 429
 No. of persons treated 166 293 459
 No. of contacts treated 73 221 294
 No. of re-infections 15 19 34

	School Age	Others	Total
No. of homes visited — — 4	—	—	4
No. of persons treated 12 460 472	12	460	472
No. of treatments involved 1,593 176 1,769	1,593	176	1,769
No. of contacts treated 73 221 294	73	221	294
No. of re-infections 15 19 34	15	19	34

(Continued)

3. DISINFECTION						
				City		Outside Authorities
No. of houses visited ..	..	..	..	..	240	—
No. of rooms disinfected ..	..	..	..	..	433	—
No. of beds disinfected ..	..	..	..	..	202	—
No. of articles disinfected ..	..	..	..	..	15,486	—
No. of school toilets disinfected ..	..	..	..	..	2,074	—
4. PUBLIC CONVENIENCES						
				No. of Visits	No. of flushings	
Visits paid for cleansing purposes ..	..	..	..	22,231	Drains	W.C.s.
Visits paid for inspection of lighting and emergency repairs ..	..	..	..	18,558	Lighting	Repairs
5. PUBLIC SEWERS						
No. of public sewers cleansed ..	..	..	..	..	..	1,076
No. of private drains tested and cleansed ..	..	..	..	..	..	34,071
6. TRANSPORT						
(a) <i>Medical Loan Scheme</i>						
Visits made for collection and delivery of invalid chairs, spinal carriages etc ..	..	..	..	..	..	368
No. of miles involved ..	..	..	..	..	..	2,119
(b) <i>Chest Clinic</i>						
No. of houses visited ..	..	..	..	..	..	109
No. of bedsteads, beds, etc, delivered ..	..	..	..	..	..	359
No. of miles involved ..	..	..	..	..	..	645
(c) <i>Delivery Service</i>						
Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores ..	..	..	..	..	..	9,536
7. INCONTINENT LAUNDRY SERVICE						
No. of visits paid ..	..	..	..	..	..	9,524
No. of miles involved ..	..	..	..	..	..	17,102

National Health Service Act 1946

- Section 22 CARE OF MOTHERS AND YOUNG CHILDREN**
- Section 23 MIDWIFERY**
- Section 24 HEALTH VISITING**
- Section 25 HOME NURSING**
- Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION**
- Section 27 AMBULANCE SERVICE**
- Section 28 PREVENTION, CARE AND AFTER-CARE**
- Section 29 DOMESTIC HELP**
- Section 51 MENTAL HEALTH SERVICES**

SECTION 22

CARE OF MOTHERS AND YOUNG CHILDREN

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

Maternity and Child Welfare Centres.—There has been a further slight decrease in the number of expectant mothers attending the ante-natal clinics, but the number of children under 5 years attending the infant clinics has increased during 1961. More expectant mothers are now receiving ante-natal care from their own doctors, when booked for confinement in hospital. The continuity of medical care throughout pregnancy and during the confinement is particularly important when the mother is confined at home. The increase in the attendances of children at the clinics may be due partly to the rise in the birth-rate, but it does indicate that the infant welfare clinics are still a very important part of the Maternity and Child Welfare Service.

The Leeds Health Authority continues to act as a central booking agency for maternity hospitals in the city and this encourages early attendance at the ante-natal clinics where medical supervision of the patient can be carried out until the last six weeks of pregnancy, if this is not undertaken by the general practitioner. It is an advantage to the mother to be able to attend her local clinic and this also helps to prevent over-crowding of the hospital clinics. There is, however, an increasing tendency for general practitioners to refer their patients direct to hospital. In such cases the assessment of social need for hospital confinement is made by the Local Health Authority.

Welfare Foods.—National dried milk for infants, and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics. There has been a lessening demand since the increase in price and since cod liver oil and vitamin tablets are no longer supplied free of charge.

Educational Work.—Health education in the clinics by the health visitors has been expanded during the year with more organised discussion groups and demonstrations. Dental hygienists have continued to visit the clinics in rotation to advise mothers in the proper care of their own and their children's teeth.

Special demonstrations on foot-health for children were held at a number of clinics through the courtesy of a firm of manufacturers of children's shoes.

Leeds Babies' Welcome Association.—Members have continued to give their regular and valuable help in the clinics as voluntary workers ; assisting with routine clerical work ; in some clinics undertaking the weighing of the children, and organising play corners for toddlers ; being responsible for the sale of knitting wool, baby clothes and fireguards ; and at all times helping to maintain a friendly atmosphere in the clinics. Members have also continued in their efforts for " Safety in the Home " and guarding against accidents, particularly burns and scalds of your children. Special efforts have continued by the Association to facilitate the purchase of flameproof material for children's garments and to urge mothers to procure this material.

Ante-Natal Clinics.—By 31st December, 1961, there were 191 ante-natal sessions held per month at 22 clinics. The number of expectant mothers attending the clinics during the year was 8,053, a decrease of 631 ; of this total 5,436 were new cases. The total number of attendances at all clinics was 29,114 a decrease of 3,019. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 108 sessions per month carried out by municipal midwives.

Post-Natal Clinics.—There have been 17 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 739 with a total number of attendances of 822. The majority of mothers now attend the hospital or their private doctor for post-natal examination.

Infant Clinics.—There were 28 clinics in operation at the end of the year at which 243 sessions were held per month. The number

of infants under one year attending the clinics for the first time was 6,046, an increase of 182. During the year 4,237 children between one and two years attended and 3,554 children between two and five years, an increase of 359 and 29 respectively, making the total number

of children attending 13,837 with 80,454 attendances made, an increase of 570 in the total number of children and an increase of 2,054 in the total attendances. The number of children on the register at all clinics on 31st December, 1960, was 14,685, with 6,686 new children registered, 6,411 names removed of children who were 5 years old, had defaulted, died or left the district, the number on 31st December, 1961, was 14,960, an increase of 274 on the previous year.

Consultative Infant Clinics.—The arrangements with the University Department of Paediatrics and Child Health continued, and three consultative infant clinics were held each month. The total number of attendances of children under five years was 135.

Physiotherapy.—The number of children referred during the year for examination by the Orthopaedic Consultant was 183, a decrease of 58 on the number referred in 1960.

Artificial Sunlight.—This was given to 343 children during the year and the total number of attendances at five infant welfare centres was 4,371. These figures show an increase of 37 in the number of children attending but a decrease of 55 attendances compared with those for 1960.

Remedial Exercises.—A total of 218 children attended for exercises with 2,316 attendances, a decrease of 6 in the number of children in 1960.

Ante-natal and Post-natal Classes.—These exercise classes for expectant and nursing mothers were held at 8 welfare centres. The value of these classes and of the explanatory talks given by the physiotherapist is much appreciated by the mothers who attend. There were 392 mothers who attended ante-natal classes and the total number of attendances was 2,032. These figures show an increase for 1961 of 173 and 1,151 respectively.

Eye Defects.—*Children classified as blind or partially blind.*—

There were 8 blind, and 3 partially sighted children, under five years, on the register on 31st December, 1960. There were 2 children notified as blind during 1961. Of these 13 children, 5 names were removed from the register when the children reached five years of age, 1 child died, leaving 6 children registered as blind and one as partially sighted, on 31st December, 1961. All children remained in their own homes and there were no admissions to Sunshine Homes.

The arrangement has continued for any child under 5 years attending the infant welfare clinics who is found to have a squint or other eye defect, to be referred to the ophthalmic consultant at the school clinic, thus providing continuity of supervision and treatment for such cases.

During 1961 the number of children seen by the consultant for the first time was 126; in addition, 119 children re-attended for further consultation, making a total of 245 children examined. This is a decrease of 24 on the number seen in 1960.

Care of Premature Infants.—Between 1st January and 31st December, 1961, there were 641 live births notified of infants weighing $5\frac{1}{2}$ lbs. or less at birth. Of these, 519 were born in hospital or nursing home in the city, and 122 were born at home. The number of those born at home who were removed to hospital was 36 and the remaining 86 were nursed at home.

The number of infants who died within 24 hours of birth was 61, of these 56 were born in hospital. Of the 5 born at home, 2 were transferred to hospital and 3 died at home.

Of the 86 infants nursed at home 48 received special nursing care by the premature baby midwives, with a total of 1,526 home visits.

As well as nursing those infants born at home, the premature baby midwives undertook the after-care of 493 infants requiring further nursing care following discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals. The total number of home visits to these cases was 5,214. These figures show an increase of 40 and 351 respectively, for 1961.

Provision for the Care of the Unmarried Mother and her Child.—The arrangements have continued with the three homes in the city run by voluntary organisations to admit Leeds cases recommended by the Health Committee and for which the Committee accept financial responsibility for a period of three to four months. Arrangement was also made for cases which cannot be admitted to these voluntary homes to be taken for a limited period into the Bradford Local Authority home. In exceptional circumstances Leeds cases may be admitted to other voluntary homes outside of Leeds.

During 1961 admissions to these homes were as follows and show a total increase of 10 cases compared with 1960:—

Mother and Baby Home	No. of mothers admitted
Mount Cross Salvation Army Home, Leeds	26
St. Margaret's Roman Catholic Home, Leeds	15
Browning House, Church of England Home, Leeds	17
Bradford Local Authority Home ..	2
Other homes	6
 Total	66
 =	

Convalescence.—During 1961, 46 mothers and 47 children under five years were referred from the Maternity and Child Welfare Clinics and sent for a period of convalescence.

Day Nurseries.—There was a steady demand for the admission of children to the day nurseries, and it was possible to arrange admission without undue delay. Priority was still given to children according to social or economic circumstances necessitating the mother going to work, or, in a small number of cases, where the mother was dead or had deserted the family. A few special cases were admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year :—

	No. of Places	Daily Attendance per 5 day week	Total Number of Attendances
DAY NURSERIES			
Quarry Hill ..	50	43.2	11,204
Blenheim Lodge ..	50	36.8	9,418
Harehills ..	50	38.8	9,920
Hunslet Hall ..	50	44.6	11,477
Armley	55	37.9	9,566
Meanwood	55	38.3	9,983
Burley Park	75	45.9	11,610
Totals	385	285.5	73,178
% attendance		74.2%	

Adoption Act, 1950.—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinics or by the private doctor and blood tests are taken prior to the child being placed for adoption.

In this connection 68 mothers and 126 children had blood tests carried out. The comparative figures for 1960 were 64 and 100 respectively.

Nurseries and Child Minders Act, 1948.—Under this Act applications were received during the year from 19 persons for registration as child minders, and 1 additional day nursery was registered.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded :—

	Child Minders	Nurseries
No. on register at 31st December, 1960	38	13
Permitted No. of children at 31st December, 1960	229	469
No. registered during the year ..	19	1
No. of applications refused	—	—
No. of registrations cancelled	10	1
No. on register at 31st December, 1961 ..	47	13
Permitted No. of children at 31st December, 1961	287	475

Registered Nursing Homes.—The following table gives particulars of registered nursing homes in the city:—

REGISTERED NURSING HOMES.

	Maternity		Maternity and General		General		Total			
	No. of Homes	No. of Beds	No. of Homes	No. of Beds		No. of Homes	No. of Beds	No. of Homes	No. of Beds	
				Mat'y	Gen.					
Existing at 31st Dec., 1960 ..	3	65	..	..	..	6	86	9	65	86
Registration approved during 1961 .. ..	..	..	..	..	..	..	..	..	..	..
Registration cancelled or surrendered during 1961 ..	..	..	..	..	..	..	..	..	..	..
Existing at 31st Dec., 1961 ..	3	*	..	..	..	6	86	9	65	86

* Figure includes ante-natal and post-natal beds in two mother and baby homes (Mount Cross and St. Margaret's). Actual number of lying-in maternity beds is 25.

Nurses Act, 1943—Part II.—*Agencies for the supply of nurses.*—Under this Act one nursing agency applied for re-registration in 1961 and the licence was renewed. One agency applied for registration and this was approved subject to certain requirements being met.

Children Neglected or Ill-Treated in their Homes.—The Co-ordinating Committee, comprised of representatives of the Public Health, Education, Housing, Welfare Services, Probation, Police, Mental Health and Care of Children Departments, inspectors of the N.S.P.C.C. and a representative of the recently established Family Service Unit has met regularly each month to consider significant cases of children neglected or ill-treated in their own homes.

In each case the needs of the family as a whole are considered and agreement reached as to how local services, both statutory and voluntary, can best be applied to meet these needs.

During 1961, 32 new cases involving 128 children were considered and each case referred to the statutory or voluntary body best fitted to deal with the problems. In addition, 7 cases previously notified were re-considered.

The following table shows some of the contributory factors affecting the cases considered and emphasises the complexity of the problems confronting the case workers :—

Notified by	Number of cases					
	1956	1957	1958	1959	1960	1961
Department :						
Probation	2	..	1	2	2	4
N.S.P.C.C.	3	3	2	5	3	6
Police	7	1	10	2	9	4
Health	6	21	10	12	9	4
Housing	2	2	1	2	3	5
Care of Children	10	2	4	1	5	2
Education	2	1	..	..	2	2
Welfare Services .. .. ..	..	1	1	7	..	1
Miscellaneous .. .. ..	..	4	4	..	4	2
F.S.U. .. .. ..	..	..	..	..	..	1
Mental Health .. .. ..	..	..	..	..	..	1
 Totals	32	35	33	31	37	32*

* Plus 7 cases reconsidered

The following table shows the number of cases notified and the notifying agencies :—

**PARENTAL FACTORS NOTED IN THE 32 CASES OF NEGLECT
CONSIDERED DURING 1961.**

Case	Broken homes	Incomplete homes	Cohabiting	Low intelligence	Selfish and Indifferent	Shiftless and fickleless	Household mis-management	Housing problems	Dirty homes	Abandoned	Ill-treatment	Unwanted child	Ill health (M=Mental)	Total
1	M	1
2	1	4	4
3	4	4
4	2	2
5	2	2
6	1	1
7	3	3
8	4	4
9	2	2
10	1	1
11	6	6
12	3	3
13	4	4
14	2	2
15	M	2
16	3	3
17	1	1
18	5	5
19	7	7
20	3	3
21	1	1
22	2	2
23	M	6
24	1	1
25	3	3
26	2	2
27	4	4
28	3	3
29	1	1
30	4	4
31	1	1
32	4	4
Totals ..	6	4	3	5	18	14	17	7	9	..	1	4	7	95

Dental Care of Mothers and Young Children (Report of Mr. D. E. Taylor, L.D.S., Senior Dental Officer).—The number of sessions spent during the year on the dental inspection and treatment of mothers and pre-school children was equivalent to 0.6 dental officers and 0.4 dental hygienists.

The findings in the investigation into the dental condition of three-year old children were as follows. The figures in brackets are the totals to date.

Number examined	145 (1,223)
Number free from caries	80 (751)
Number treated by filling	20 (135)
Number treated by extraction	17 (83)
Number defected but not treated	28 (254)
Distortion of arches due to thumb and finger sucking	15 (139)
Distortion of arches due to "dummy" sucking	12 (94)
Hereditary malocclusions :—	
Superior protrusion	8 (61)
Inferior protrusion	— (6)
Overcrowding	1 (5)
Malocclusions where no cause could be found :—	
Open bite	— (5)
Crossbite	3 (12)
Overcrowding	— (3)

There were six cases of excessive overbite in those examined this year.

Experience has shown that where caries is present in the 3 and 4 age groups the success of conservative treatment depends on being able to persuade the child not to eat sweets between meals and when there is no co-operation it has been found that even with thrice yearly visits it is impossible to maintain the temporary dentition till the normal shedding time. It is doubtful whether in such cases the patient receives any benefit from the work done, to offer only extraction when necessary would seem to be the more satisfactory line of treatment.

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	581	524	508	240
Children under 5 years ..	435	258	172	136

WORK OF DENTAL OFFICERS

	Expectant Mothers	Nursing Mothers
No. of inspection invitations	1,023	1
No. of inspection attendances	580	1
No. found dentally fit	57	..
No. accepted treatment	507	1
No. refused treatment	16	..
Total No. of teeth filled	450	3
Type of filling given :—		
Synthetic porcelain	102	..
Cement	4	..
Amalgam	8	..
Lined Amalgam	376	3
Total fillings given	490	3
Total No. of teeth extracted	869	182
.. persons fitted with dentures	217	17
.. other treatments	45	21
.. local anaesthetics	413	16
.. general anaesthetics	130	21
.. treatment sessions	241	
.. inspection sessions	29½	
.. attendances for treatment	760	522
.. persons made dentally fit	122	118

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	1,051	302
Anæsthetics :—		
Local	429	..
General	151	183
Fillings	493	152
Scalings or scaling and Gum Treatment	339	..
Radiographs	15	4
Dentures provided :—		
Complete	154	..
Partial	93	..

MR. TAYLOR'S PRE-SCHOOL CLINIC

Number examined	175
,, free from caries	97
,, treated by fillings	24
,, " extraction	13
,, defective but not treated	41

WORK OF ORAL HYGIENISTS

		Expectant Mothers	Nursing Mothers
No. of attendances	339	..	
.. " scalings	339	..	
.. " treatment sessions	91 $\frac{1}{2}$		
.. " hygiene lecture sessions	178		
.. " individuals treated	176	..	
.. " made dentally fit	176	..	

WORK BY LABORATORY TECHNICIANS

Dentures for mothers	247
.. " school children	60
Repairs	19
Crowns, splints	58
Orthodontic appliances	454

SECTION 23**MIDWIFERY**

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

AND

ELSIE L. MANN, S.R.N. S.C.M.,

Supervisor of Midwives

The establishment of a Maternity Liaison Committee in March, 1961, has proved of value in co-ordinating the three parts of the Maternity Services.

The number of maternity beds in the three hospitals in the city is insufficient to meet the demand for hospital confinement and it has been necessary for the hospitals to continue to refuse a considerable number of applications made through the Maternity and Child Welfare Clinics. No mother is refused a hospital bed if there is any medical, obstetric or social reason necessitating a hospital confinement. Home circumstances are always investigated and reported on by a midwife before any mother is asked to arrange a home confinement.

In the domiciliary service there is good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services continues to work satisfactorily. This arrangement prevents the doctor being called in to an emergency knowing nothing of the patient, and such cases are now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, use is being made of the Local Health Authority Clinics, patients being referred for blood tests to be carried out, chest X-rays arranged and to take advantage of other facilities such as ante-natal exercise classes.

Midwifery Training—Part II.—The training school at Redcourt Hostel is now well known as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months' training is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. There are 31 domiciliary midwives who are approved by the Central Midwives' Board as teachers of pupil midwives ; 4 of these were approved during the year. The teacher midwives work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives.

During the year 36 pupil midwives completed their training. Of these 34 passed the Part II Examination of the Central Midwives' Board at the first attempt, and two at the second attempt. On 31st December, 1961, there were 26 pupil midwives in training.

Notified Births.—The total number of notified births of Leeds cases during the year was 9,372. Of these, 6,297 or 67.2 per cent. took place in hospitals or nursing homes and 3,075 or 32.8 per cent. were domiciliary cases. The comparative figures for 1960 were :— hospital cases 65 per cent. and home confinements 35 per cent.

The number of domiciliary births notified by midwives was 3,053 or 99 per cent. of the total domiciliary births.

Notification of Intention to Practise.—The number of midwives who notified their intention to practise as midwives during the year was 191 ; taking into account retirements, etc. the number of midwives practising in the city on 31st December, 1961, was 146. Of these, 81 were employed in hospitals, 10 in private nursing homes, 2 as private midwives and 53 were employed by the Local Authority.

Domiciliary Midwifery Service.—The average number of midwives employed by the Local Health Authority in domiciliary work throughout the year was 46 full-time. During the year 2 midwives retired, 2 midwives resigned and 5 new appointments were made. On 31st December, 1961, there were 48 domiciliary midwives (including 4 midwives undertaking the nursing care of premature babies). In October, 1961, the full-time establishment was increased to 50. In addition, 4 midwives were employed part-time. The number of domiciliary births attended by municipal midwives during the year was 3,053 or 32.6 per cent. of the total births notified in the city. The comparative figures for 1960 were 3,168 or 35 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1960 and 1961:—

		1960	1961
Ante-natal visits	.. .. .. ..	24,641	23,740
Attendance at birth	.. .. ..	3,168	3,053
Post-natal visits	.. .. .. ..	51,826	43,959
Bookings	.. .. .. ..	3,231	2,930
Attendance by patients at midwife's clinics	.. .. .. .. ..	31,624	26,814
No. of patients who had Gas/Air or Trilene analgesia	.. .. .. ..	2,668 or 84.2%	2,818 or 92.3%

Of the 43,959 post-natal visits paid by the midwives in 1961, 3,937 were to patients discharged home from hospital before the 10th day of the puerperium.

Analgesia.—All municipal midwives are qualified to administer Gas/Air and Trilene analgesia and each midwife is provided with the approved apparatus. Every expectant mother who books the services of a municipal midwife is given the opportunity of having analgesia at her confinement unless her doctor certifies her as medically unfit. Of the 3,053 patients attended at home by municipal

midwives 2,818 or 92.3 per cent. were given either Trilene and/or Gas/Air analgesia. In 29 cases only, Gas/Air analgesia was used. Pethidine is also given by the midwife when advisable and was given to 1,566 patients.

Maternity Outfits.—A sterilised and sealed packet containing all dressings required at the confinement, as specified by the Ministry of Health, is provided by the local health authority for every case attended by a municipal midwife. Outfits are available for domiciliary confinements attended by private midwives or maternity nurses, and for Leeds cases in mother and baby homes. In two private maternity homes outfits can also be obtained for Leeds patients. During 1961, 400 outfits were supplied through the Maternity and Child Welfare Clinics for such patients.

Medical Assistance.—During the year 921 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 13 notifications for emergencies under Section 14 of the Midwives Act, 1951, compared with 4 for the previous year and only 6 claims for payment for attendance were received from medical practitioners.

Supervision of Midwives.—The domiciliary municipal midwives were interviewed each week at the Health Department by the non-medical Supervisor of Midwives. She made 103 visits to see the midwives in their homes and at their cases, and in addition paid 249 special visits.

SECTION 24

HEALTH VISITING

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,
Assistant Medical Officer of Health for Maternity and Child Welfare
 AND
 JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),
Superintendent Health Visitor

The total number of visits paid by health visitors was 152,091, a reduction of 1,823 on the number in 1960.

The following table gives comparable figures of the work done in 1960 and 1961:—

	1960	1961
Notified births, and children under 5 years	116,864	115,041
Children over 5 years	601	549
Stillbirths	117	120
Deaths of children under 5 years ..	170	103
Ophthalmia Neonatorum	*7	*12
Expectant Mothers	3,152	3,297
Adoption visits	*168	*100
Child Minders	*269	*349
Day Nursery admissions and absentees	*59	*74
Tuberculous households	6,605	6,464
Housing reports	906	849
Research Enquiries and adults not classified	3,067	3,245
Cases discharged from hospital .. .. ..	..	..
Home Help investigations	27	17
Ineffectual visits	22,405	22,406
Total visits for the year	153,914	152,091

*included in visits to children under 5 years.

Visits to mothers and young children continued to be the health visitors' basic duty, but as a result of staff vacancies in the early part of the year there was a reduction in the number of visits to children under 5 years, which accounts for the reduction in the total number of visits. Visiting was selective and special attention was given where necessary to problem families. There was a slight increase in the number of visits paid to expectant mothers and to children in the care of registered daily minders. The health visitors continue to assist with the practical training of health visitor and other students.

Further information regarding the work of the health visitors is given in this Report in the sections relating to Health Education and Care and After-Care.

HEALTH VISITOR TRAINING

BY

FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.,
Health Visitor Tutor

Of the 44 student health visitors who registered at the University for the 1960-61 session, 10 were sponsored by Leeds City Council. The remaining places were filled by students who were sponsored by the West Riding and Lancashire County Councils and adjacent County Borough Councils who usually send their students to be trained at Leeds.

Arrangement of the Course.—It had been agreed that the course should, this year, be arranged on a system of block teaching, keeping theoretical and practical work separate on the assumption that the students would be prepared theoretically before going on to practical instruction and also would be saved travelling time when working in rural areas.

Other Local Authorities.—This necessitated using the facilities of other County Boroughs in addition to Leeds as the practical work had to be concentrated over shorter periods. We had excellent co-operation from the staffs of the Public Health Departments of Sheffield, Barnsley, Dewsbury, Wakefield and Doncaster who not only helped with the practical instruction of their own students, but of many others as well.

Our thanks are due, as usual, to the Public Health, Welfare, Child Care and Mental Health Departments of Leeds and West Riding whose staff always bear the greatest brunt of the practical instruction and have given of their time and interest year after year without complaint.

The Lecture Course.—The number and order of the lectures was revised slightly to bring in new legislation, to cut out any duplication of material and to correlate with the practical instruction. Some difficulties had to be overcome in arranging lectures to fit in with the altered time-table as lecturers have many other commitments.

Work accomplished.—The same amount of theoretical and practical work was accomplished as in previous years although not in the same order. The students worked well and, as usual, many of them matured considerably in outlook and understanding of problems of family life. In this same context they also learned to use the Social Services appropriately by gaining first-hand information of the resources available in urban and rural areas.

Conduct of the examination.—Owing to changes in the examination procedure the tutors in this Department acted for the first time as internal examiners and it was felt to be advantageous to have someone present who had personal knowledge of the students' abilities.

Examination results.—The results were again satisfactory. Forty-two students had completed the course out of whom thirty-nine were successful. One of the Leeds students had withdrawn and of the nine who remained all passed the examination at the first attempt.

SECTION 25

HOME NURSING

BY

KATHLEEN E. WHALLEY, S.R.N., S.C.M.,
Superintendent Home Nurse

For several years the numbers of new patients treated has been falling but the decrease in 1961 has been extremely small. For the third year the proportion of patients requiring injections has fallen and the proportion of those requiring visits for other reasons, usually general nursing care, has risen substantially.

SOURCES OF CASES 1959-61

	1959	1960	1961
General practitioners	6,300	5,268	4,989
Hospitals	2,492	2,070	2,292
Direct application and/or relatives, etc.	68	139	139
Totals	8,860	7,477	7,420

CLASSIFICATION OF CASES 1959-61

Classification	1959		1960		1961	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	6,270	208,673	5,191	188,981	5,038	180,831
Surgical ..	1,790	35,320	1,635	33,279	1,811	37,877
Children under 5 years ..	573	5,282	528	4,724	458	4,095
Pneumonia ..	107	1,155	57	672	42	493
Tuberculosis ..	66	3,589	27	1,747	25	1,299
Maternal complications ..	45	413	36	317	39	393
Ophthalmia neonatorum ..	..	..	1	2	1	3
Infectious diseases ..	9	55	2	12	6	59
Totals ..	8,860	254,487	7,477	229,734	7,420	225,050

There has been a decrease of 57 new patients and 4,684 visits on the previous year. Of the 7,420 patients, 2,781 have received injection treatment of various types, necessitating 103,589 visits.

During the year 3,191 patients aged 65 years and over have been nursed and received 136,234 visits compared with 3,290 patients and 138,846 visits during 1960.

The following tables give the number of patients nursed aged 65 years and over and tuberculous patients nursed :—

		Patients	Visits
1959	..	3,769	151,392
1960	..	3,290	138,846
1961	..	3,191	136,234
		Tuberculous Patients Nursed	
		Patients	Visits
1959	..	66	3,589
1960	..	27	1,747
1961	..	25	1,299

Staff.—The nursing staff is as follows :—

		Full-time	Part-time	Staff in terms of full-time
December, 1959	..	60	9	64½
„ 1960	..	54	10	59
„ 1961	..	63	14	70

There are 13 motor cars available for use in the more distant areas of the city.

Training.—The Training Scheme for the National Certificate has been in operation throughout the year. The examination for the first course was held in January and two further courses followed with examinations in May and September. 24 nurses who took the course obtained the National Certificate, 21 of them being existing members of the Home Nursing staff who took advantage of the Health Committee's special arrangements for them to take the course.

Medical Requisites Loan Scheme.—The arrangements for the loan of sick-room equipment and medical and surgical requisites have been operated from the depot at Market Buildings. During the year 2,668 articles were loaned as compared with 2,966 in the previous year, and 2,567 returned as against 2,771. There were 4,618 applications for extensions of loan periods and 465 persons defaulted with regard to the conditions of loan.

CLASSIFICATION OF MEDICAL REQUISITES

Articles						Loaned	Returned
Air rings	..	..	..	..	..	433	429
Bed pans	..	..	..	..	..	667	642
Mackintosh sheets	..	..	..	..	..	681	654
Back rests	..	..	..	..	..	340	355
Urinals	..	..	..	..	..	209	194
Cradles	..	..	..	..	..	131	128
Commodes	..	..	..	..	..	82	64
Crutches	..	..	..	..	..	12	9
Douche outfits	..	..	..	..	..	1	1
Polystrene blocks	..	..	..	..	..	3	..
Rubber bed pans	..	..	..	..	..	6	7
Bed trays and tables	..	..	..	..	..	..	1
Dunlopillo mattress and cover	..	..	..	..	..	7	8
Wheel chairs	..	..	..	..	..	47	45
Bedstead with chain and pulley	..	..	..	..	..	6	5
Chiron alarm	..	..	..	..	..	1	..
Relaxation chairs	..	..	..	..	..	1	2
Bed blocks	..	..	..	..	..	2	..
Stand pulleys	..	..	..	..	..	8	6
Sani-chair	..	..	..	..	..	1	..
Single bed	..	..	..	..	..	5	3
Mattress	..	..	..	..	..	5	3
Bed with cot sides	..	..	..	..	..	..	1
Walking sticks	..	..	..	..	..	10	4
Ripple bed on hire	..	..	..	..	..	5	4
Walking aid	..	..	..	..	..	2	1
Sputum mugs	..	..	..	..	..	3	1
Totals						2,668	2,567

SECTION 26

VACCINATION AND IMMUNISATION

BY

MARGARET STEANE, M.B., Ch.B.

Assistant Medical Officer of Health for Immunisation

Vaccination against poliomyelitis was curtailed during the latter part of the year owing to the shortage of vaccine. Supplies were very limited from August onwards and the issue of vaccine to general practitioners had to be temporarily suspended in November and December. In April, the Ministry of Health authorised that fourth poliomyelitis injections be given to school children between the ages of 5 and 12 years. The number of children who were given these injections was 24,246, the bulk of the injections (20,016) being given in schools by the staff of the School Health Service.

The number of injections against whooping cough, diphtheria, poliomyelitis and smallpox, etc., given during the year was 135,847, of which 47,143 were given by the Public Health Department staff, 20,016 by the School Health Service staff and 68,688 by general practitioners.

Dr. Margaret Steane, M.B., Ch.B., was appointed as Assistant Medical Officer of Health for Immunisation in place of Dr. A. Shaw (resigned) and commenced duty on 1st October, 1961.

Poliomyelitis Vaccination.—The percentage of under-fives vaccinated against poliomyelitis was 58.0 as compared with 55.8 per cent. last year. The overall percentage up to the age of 15 was 73.4. During the year 11 visits were made to factories resulting in the primary vaccination of 313 adult persons. 237 third injections were also given at factories.

ANTI-POLIOMYELITIS VACCINATION

PROGRESS OF VACCINATION SCHEME SINCE 1956

Year of Birth	Number of persons vaccinated with 2 injections						
	1956	1957	1958	1959	1960	1961	Total
1920-32 ..	..	..	..	..	6,641	8,080	14,721
1933-42 ..	..	27	1,445	19,738	3,861	4,299	29,370
1943 ..	..	21	3,063	743	122	209	4,158
1944 ..	..	21	4,379	889	91	189	5,569
1945 ..	..	27	4,155	836	61	136	5,215
1946 ..	..	37	5,419	1,197	74	126	6,853
1947 ..	345	2,573	3,376	1,096	83	199	7,672
1948 ..	339	2,315	2,989	968	95	175	6,881
1949 ..	311	1,980	2,957	872	90	215	6,425
1950 ..	302	1,835	3,002	867	109	209	6,324
1951 ..	216	879	3,899	897	95	224	6,210
1952 ..	53	514	4,067	1,007	125	231	5,997
1953 ..	61	559	2,337	1,653	297	494	5,401
1954 ..	27	431	2,193	1,791	324	540	5,312
1955 ..	..	538	2,224	1,845	314	501	5,422
1956 ..	..	407	2,393	2,058	353	552	5,763
1957 ..	..	7	2,516	2,724	470	616	6,333
1958 ..	..	..	385	4,043	1,023	799	6,250
1959 ..	..	..	..	518	3,445	1,472	5,435
1960 ..	..	..	..	..	544	4,540	5,084
1961 ..	..	..	..	..	..	666	666
Expectant mothers ..	..	4	988	2,749	..	..	3,741
Other groups ..	..	..	405	394	16	51	866
Totals ..	1,654	12,175	52,192	46,885	18,233	24,529*	155,668

*included in the total for 1961 are 623 expectant mothers (now shown in the respective years of birth)

The total for 1961 includes 16,381 by general practitioners. 13,872 third injections were given, including 9,843 by general practitioners. The number of children given fourth injections was 24,246 of which 3,539 were given by general practitioners.

PERCENTAGES OF CHILDREN IN VARIOUS AGE GROUPS
VACCINATED AGAINST POLIOMYELITIS

Age (years)	0-4	5-9	10-14	5-14	0-14
Percentage vaccinated..	58.0	79.7	83.8	81.9	73.4

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1960	1961
Diphtheria (T.A.F.)	701 doses	1,366 doses
Diphtheria (F.T.)	2,523 ..	1,547 ..
Combined diphtheria and whooping cough	1,751 ..	1,941 ..
Whooping cough vaccine ..	1,688 ..	1,043 ..
Diphtheria/Tetanus/Pertussis	9,186 ..	14,574 ..
Combined diphtheria and tetanus	776 ..	1,877 ..
Combined whooping cough and tetanus	345 ..	378 ..
Tetanus only .. .. ..	..	2,685 ..
Polio vaccine	53,437 ..	50,598 ..

Smallpox Vaccination.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table.

	Under 1 year	1-4 years	5-14 years	15 and over	1961 Total	1960 Total
Vaccinated (a)	1,247	377	28	67	1,719	1,955
(b)	1,938	575	130	209	2,852	2,833
Re-vaccinated (a)	..	4	24	739	767	400
(b)	..	28	111	726	865	789
Totals ..	3,185	984	293	1,741	6,203	5,977

(a) by clinic staff.

(b) by general practitioners.

From the returns of primary vaccinations in infants, it is calculated that approximately 36.0 per cent. of the infant population born between July, 1960, and June, 1961, has been protected.

Diphtheria Immunisation.—The percentage of children under 5 years immunised against diphtheria was 64.8, a slight increase on last year's figure of 59.3 per cent.

Our diphtheria immunisation programme in schools was again curtailed owing to fourth polio injections but, nevertheless, it was possible to give nearly 4,000 refresher doses in schools.

The final results of the investigation on the immunising properties of diphtheria formol toxoid confirmed our earlier findings that it is a poor antigen for diphtheria immunisation. The Department has reverted to the use of triple antigen (diphtheria/whooping cough/tetanus) for the immunisation of children under 5 years of age which gives diphtheria protection far superior to that given by formal toxoid. It is also anticipated that the reduction in the number of injections necessary will result in a higher rate of immunisation in babies. The Public Health Laboratory discontinued the issue of formal toxoid from October, 1961.

The following table shows the extent of diphtheria immunisation work during the year.

Prophylactic	Clinic doctors :—				General Practnrs.	Total
	I.W.C.'s	Schools	Home visits	Mobile Clinics		
Diphtheria only ..	2,103	989	..	18	624	3,734
Diphtheria/Tetanus ..	258	..	..	11	168	437
Diphtheria/ Whooping Cough ..	..	..	..	..	434	434
Whooping Cough/ Tetanus ..	1	..	..	..	68	69
Triple Antigen ..	992	..	..	33	3,897	4,922
Whooping Cough only ..	2,453	..	..	65	321	2,839
Tetanus only ..	78	..	..	3	195	276
 Total protected against Diphtheria	 3,353	 989	 ..	 62	 5,123	 9,527
 Total protected against Whooping Cough ..	 3,446	..	..	98	 4,720	 8,264
 Total protected against Tetanus ..	 1,329	..	..	47	 4,328	 5,704
 Refresher Doses :—						
Diphtheria only ..	203	3,738	..	..	1,349	5,290
Diphtheria/Tetanus ..	..	14	..	..	106	120
Diphtheria/ Whooping Cough ..	..	..	..	..	206	206
Triple Antigen ..	3	..	..	..	600	603
Whooping Cough/ Tetanus ..	..	..	..	..	18	18
Whooping Cough only ..	1	..	..	..	..	1
Tetanus only ..	8	..	..	..	53	61

Estimates of the Child Population immunised against Diphtheria.—

Estimates of the child population immunised against diphtheria at 31st December, 1961, and in previous years are shown in the following table.

Year	Percentage in age group			
	0-4 years	1-4 years	5-14 years	0-14 years
1952	72.5	79.3	94.5	86.4
1953	70.5	78.0	94.0	85.8
1954	67.1	73.3	96.1	86.1
1955	65.2	72.2	95.0	85.0
1956	64.0	70.6	94.3	84.2
1957	61.0	66.9	94.5	83.3
1958	59.6	65.0	93.6	82.1
1959	58.8	62.7	91.5	80.4
1960	59.3	62.8	90.6	79.7
1961	64.8	76.9	89.8	81.0

The table on page 98 shows the progress of the diphtheria immunisation scheme since its inception.

Whooping Cough Immunisation.—The following table shows the progress of whooping cough immunisation since 1947. The percentage of children under 5 years protected is approximately 71 per cent.

Year	Number immunised against Whooping Cough	
1947	..	975
1948	..	908
1949	..	1,016
1950	..	1,537
1951	..	3,801
1952	..	3,892
1953	..	4,877
1954	..	5,276
1955	..	4,593
1956	..	5,238
1957	..	4,894
1958	..	6,504
1959	..	6,102
1960	..	6,099
1961	..	8,269

Inoculations for Travellers going Overseas.—The number and type of inoculations are shown below (for completed courses).

Smallpox vaccination	..	840
T.A.B.	..	214 (and 9 refreshers)
Cholera	..	191 (and 8 refreshers)
Tetanus	..	117 (and 30 refreshers)
Typhus	..	3
Yellow Fever	..	687

Other Work undertaken by the Department.—*Research.*—The investigation of the immunising properties of diphtheria formal toxoid was concluded during the year. It showed this to be a poor antigen for diphtheria immunisation and its use has now been discontinued (see heading Diphtheria Immunisation).

Examination of Convalescents.—During the year 606 applicants for convalescence, including 468 children, were medically examined.

Voluntary Workers.—We are grateful to the Ladies of the Leeds Babies' Welcome Association for assistance at immunisation clinics.

DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception. Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation		1928- 1941										1942- 1955														
Under 1 year	1-2 years	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Total					
1,174	..	4,141	3,980	3,990	4,412	5,110	5,137	6,304	4,923	3,078	788	3,127	3,301	2,561	3,470	3,450	3,143	3,241	2,678	3,077	3,177	3,247	3,660	3,815	2,202	
2-3	..	3,573	2,262	1,024	460	240	777	418	455	438	457	514	391	2,931	2,714	2,056	1,757	1,898	1,658	1,857	1,413	1,506	1,277	1,325	4,206	
3-4	..	4,048	2,053	1,063	463	220	557	327	220	231	249	277	212	137	144	128	142	111	103	135	285	274	785	at end of 1961	26,585	
4-5	..	4,549	1,940	1,043	381	257	463	288	200	196	147	193	152	111	146	102	102	70	64	86	130	130	130	272	272	
6-6	..	6,556	1,486	1,667	461	360	666	366	323	323	290	263	321	274	270	338	301	288	195	59	150	150	139	139	139	
6-7	..	6,643	940	1,622	302	233	467	296	229	286	215	234	320	348	315	393	387	387	262	194	96	207	207	207	343	Total
7-8	..	5,434	676	1,482	197	185	392	225	166	143	141	108	144	147	191	217	174	117	99	96	208	208	208	342	342	
8-9	..	4,483	466	1,367	164	188	275	153	126	132	95	72	71	109	99	133	101	68	43	35	118	118	118	297	297	
9-10	..	4,271	326	1,271	157	142	269	142	110	119	70	51	65	68	70	82	79	62	34	18	69	69	69	193	29,595	
10-11	..	4,454	252	1,197	130	152	250	100	90	108	79	64	61	71	63	57	55	41	13	23	40	40	40	98	Total	
11-12	..	4,325	205	1,089	109	128	249	113	67	73	60	56	37	31	42	40	26	27	18	9	34	34	34	52	52	
12-13	..	4,211	193	1,193	96	109	185	97	80	69	55	40	48	28	26	43	33	6	14	5	19	19	19	19	10-15 years	
13-14	..	3,748	175	1,035	78	79	138	100	61	55	35	40	48	25	29	24	21	23	12	6	13	13	13	13	37,784	
14-15	..	738	148	382	8	20	34	13	49	54	31	27	38	23	20	41	29	23	24	11	8	10	10	8	5	
15 years and over	..	1,680	..	..	56	79	83	43	63	64	48	23	42	4	8	8	10	8	13	10	10	10	10	8	5
Age not known	947	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	..	64,975	15,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	7,456	6,510	6,867	6,189	6,660	5,904	5,808	5,820	6,807	6,807	6,807	9,527		

SECTION 27

AMBULANCE SERVICE

BY

J. H. DAYKIN, F.I.A.O.
Chief Ambulance Officer

The number of patients carried has risen but not so sharply as last year. Sitting case patients fell in number but those carried in ambulances and Hospital Car Service vehicles showed a slight increase. Mileage has risen considerably.

CASES REMOVED IN 1961

Type of Case	Number	Mileage
By Ambulance :—		
Road accidents	2,415	
Other accidents	2,842	
Emergency calls for illness	6,517	
Maternity	4,426	
Infectious diseases	881	
Mental	409	
Hospital admissions and discharges	20,614	
Special treatment and out-patients	35,136	
Others (incl. fruitless journeys)	3,868	
Total	77,108	
By Sitting Case vehicles :—		
Maternity and Child Welfare	60	
Special treatment and out-patients	172,128	
Doctors and Midwives	2,821	
Others (incl. fruitless journeys)	695	
Total	175,704	
Mortuary Service :—		
Bodies removed	840	4,688
Totals	253,652	990,894
Hospital Car Pool :—		
Special treatment	7,071	33,320
Grand Totals	260,723	1,024,214

In addition to the figures in the above table, 4,659 cases were removed from Leeds under the co-ordination arrangements.

COMPARATIVE TABLE

	1956	1957	1958	1959	1960	1961
Cases :—						
Ambulance ..	70,000	66,442	68,690	73,460	75,720	77,108
S.C. vehicles ..	164,135	155,015	155,939	163,265	176,642	175,704
Total ..	234,135	221,457	224,629	236,725	252,362	252,812
Mileage :—						
Ambulance ..	355,561	348,715	350,394	366,698	389,221	411,912
S.C. vehicles ..	503,619	483,427	479,757	486,804	535,220	574,294
Total ..	859,180	832,142	830,151	853,502	924,441	986,206
Hospital Car Service :—						
Cases ..	10,017	8,572	5,145	4,671	6,188	7,071
Mileage ..	69,141	59,509	34,490	25,678	32,613	33,320

“ 999 ” Calls.—A total of 8,154 calls of this nature were answered by the Service. An improvement in turning out teams from the Station was introduced, using radio control. The average time for turn out from call is now down to 15 seconds, but the majority of calls are answered by diverting vehicles already on the road. Some anxiety is being caused by ambulances finding it more and more difficult to penetrate traffic en route to calls. The police do their utmost but it is often possible to save time only by taking a longer route to the scene. It is understood that a blue revolving warning light (common to Police, Fire and Ambulance Services) will be introduced shortly and it is hoped that this will assist in securing priority of movement of ambulance vehicles.

Co-operation with other Authorities.—There has been no difficulty in maintaining the high standard of co-operation between Leeds and other Authorities. The Leeds Agreement works well and there has been found no need to call meetings other than at officer level.

Liaison with Hospitals.—The arrangements for admission of acute cases via the Bed Bureau have settled into a well-ordered routine and co-operation by general practitioners and hospitals has been excellent. The anticipated increase in patients due to winter illness did not materialise to the extent expected and thus the Service was not subjected to great strain.

Vehicles.—The vehicle replacement plan is operating quite successfully. Three ambulances and three sitting case ambulances are on order to replace vehicles which are well beyond economical repair. Special arrangements have been made whereby sitting case cars are replaced under contract yearly at most economical rates.

The vehicle establishment is as follows :—

	Authorised and Held			
Ambulances				31
Sitting case ambulances				22
Sitting case cars				8
Mortuary Service vehicles				2

No increase in vehicle establishment is contemplated at present.

Accidents.—There were 52 accidents in which Ambulance Service vehicles were involved.

Equipment.—Very few losses have been sustained during the year. Improvements in pattern are constantly appearing and all are examined carefully. The light alloy trolley now included as standard equipment in ambulances has proved of immense benefit and 12 vehicles are now equipped. All crews have expressed their liking for the trolley and many favourable comments have been received from patients and hospitals.

Radio Telephony.—To conform with the requirements of the Postmaster General, the complete radio-telephony system has been replaced with new equipment. Much research was carried out before deciding upon a frequency modulated system using high band frequencies of 166.3 and 171.1 megacycles per second. The installation was completed by the required date and the results show a great improvement. No part of the city is without cover and the system offers reception without background noise. The range covered is ample for our requirements and much "air-time" is saved since it is now no longer necessary to repeat messages to ensure understanding.

Buildings.—No major alterations to buildings have been carried out during the year. Maintenance repairs have been carried out and

two further bays have been converted to flourescent lighting. The approach roads are showing signs of breaking-up and provision for their repair is being made in the new Estimates. Some difficulty is being experienced with local residents who consistently use the lawns outside the Station as playgrounds and short-cuts. A low fence will be installed in the near future and this, together with adequate signposts, may minimise the trespassing. The greatest danger is that small children may be run down by vehicles leaving the Station and this causes no little anxiety to all ranks of the staff.

Vehicle Maintenance.—A considerable amount of work has been carried out in preventive maintenance. Three further Daimler ambulances have been completely overhauled, leaving only two to complete in 1962. Emphasis is being laid on prevention rather than cure and it is hoped to install a lift ramp to facilitate underside inspection.

Civil Defence Training.—Progress in this field has been marked. With the advent of changes in the Civil Defence Organisation of the city, responsibility for organising and training the Ambulance and First Aid Section has been placed on the Health Department and is carried out by the Chief Ambulance Officer and his staff. 1,983 hours have been spent in training and numerous exercises have been held. A further nine officers have qualfied as locally trained instructors, and some appointments have been made to fill vacancies in War Establishment. Four officers have attended Officer Courses at Civil Defence Schools. There is a shortage of Civil Defence ambulances and only one is held by this authority. A further one has been earmarked by the Ministry of Health and delivery is awaited. Although annotated in the appropriate instructions, there appears to be no authorisation for the issue of Personnel and Equipment Vehicles to be used for training First Aid Parties.

Major Accidents.—There were no major accidents in the City during the year. All accidents were dealt with without causing any dislocation to normal services provided.

Hospital Car Service.—Once again a slightly greater demand was made on the Hospital Car Service due to a further increase in aged persons attending Local Authority Chiropody Clinics.

Staff.—A considerable staff reorganisation took place during the year. The revised establishment is now as follows:—

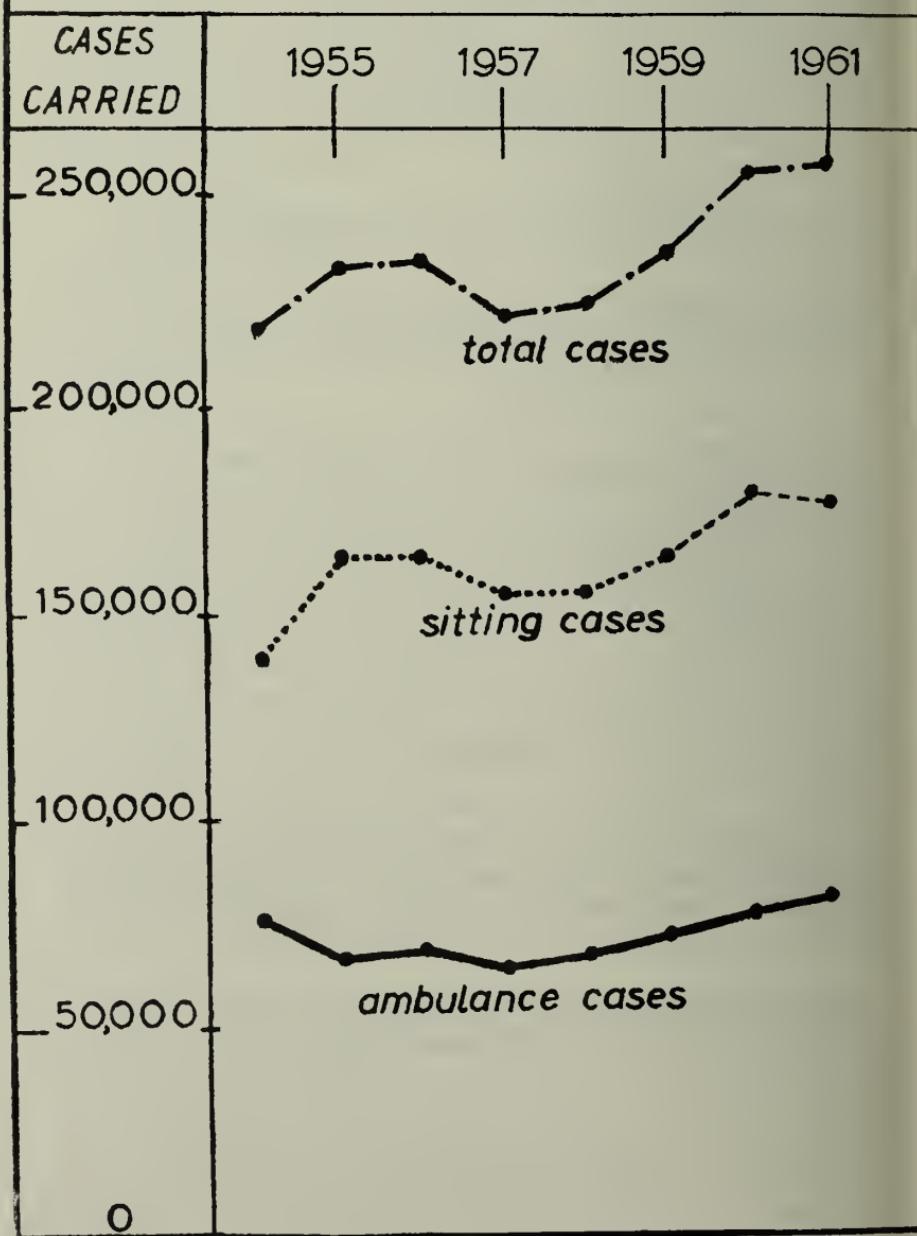
Chief Ambulance Officer	..	..	..	I
Deputy Ambulance Officer	..	..	..	I
Control Officers..	..	..	..	4
Clerk, Leeds General Infirmary (Hospital Sub-Control Officer)	..	..	..	I
Clerk, general duties	..	..	..	I
Clerk, statistics..	..	..	..	I
Car control clerks	..	..	..	2
Clerk/telephonists	..	..	..	3
			—	14
Shift leaders	..	..	..	5
Driver/attendants (male and female)			..	109
Mortuary Service drivers	..	..	..	2
Charge hand mechanic	..	..	..	I
Mechanic	..	..	..	I
Semi-skilled hands	..	..	..	2
Apprentice	..	..	..	I
Garage attendants	..	..	..	2
Vehicle washers	..	..	..	2
Cleaners ..	..	..	..	2
Storeman	..	..	..	I
			—	128
Total staff	..	..	..	142
			—	

Competitions.— The team entered in the Annual Competition produced only a disappointing result in 1961. A good effort was made, however, and all marks were very close. A further entry will be made in the 1962 Competition.

Staff Training.—Following national discussion on this subject, a pilot Course was held at Leeds General Infirmary on Wednesday, 6th September, 1961, to which came ambulance crews from most services in Yorkshire. The course was of four hours' duration and included talks on emergency obstetrics, head injuries, resuscitation and casualty procedure. The course was well received and plans are being made to repeat the course in the coming year.

CITY OF LEEDS

AMBULANCE SERVICE



SECTION 28

PREVENTION CARE AND AFTER-CARE

INCLUDING

HEALTH EDUCATION AND PUBLICITY

VENEREAL DISEASES

MEDICAL-SOCIAL WORK (GENERAL)

CONVALESCENT TREATMENT

CARE AND AFTER-CARE (HEALTH VISITING)

CHIROPODY

Other aspects are dealt with on pages 40 and 46
(TUBERCULOSIS) and page 140 (MENTAL HEALTH)

HEALTH EDUCATION AND PUBLICITY

Local Activities.—*World Health Exhibition*—“Accidents need not happen”.—The United Kingdom Committee of the World Health Organisation organises each year a celebration of World Health Day when they direct attention to some specific problem in health. The subject in 1961 was health problems relating to accidents, their prevention and treatment and the Committee approached the City Council to ask them to support this activity. The City Council agreed to do this and a Committee was formed which enlisted the support of all authorities and organisations in Leeds having an interest in accident prevention and treatment. The above-mentioned exhibition was organised and held in the Lecture Hall of the City Art Gallery, during the period 15th-19th May. The opening ceremony was performed by Sir John Charles, K.C.B., M.D., F.R.C.P., D.P.H., Chairman of the United Kingdom Committee for the World Health Organisation of the United Nations, in the presence of the Lord Mayor of Leeds ; talks, films and demonstrations took place throughout the exhibition. The Health Committee gave financial support to the exhibition and officers served on the Committee and the Publicity Sub-Committee. Health visitors assisted with a display stand and

the production of a playlet in the section organised by the Leeds Home and Child Safety Committee ; the Chief Ambulance Officer organised a staged accident outside the exhibition.

Lectures.—As in previous years, lecturers were provided to address youth clubs, associations and the like on various health topics. This is a valuable method of health education and the Department is always pleased to assist organisations by providing lecturers.

Posters, Leaflets, etc.—Copies of all posters and leaflets issued by the Central Council for Health Education have been received, and where appropriate, have been distributed within the city. Copies of the " Better Health " Journal were distributed monthly to out-patient departments of the hospitals in the city and to the infant welfare clinics. Six former Empire Marketing Board frames have again been utilised for the display of posters.

Hygiene.—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

National Activities.—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

The Health Visitors' Part in Health Education.—The health visitors have a special responsibility for health education in the home, welfare centres and clinics. They should also share the responsibility for some of the wider aspects of health education in the community. This dual role has been fully considered by the Group Adviser for Health Education in her first year's work.

General Health Education.—For some time it has been obvious that there is a need for a central index or register of equipment and visual aids which are scattered among the various sections of the Department and preliminary steps towards the establishment of such a register have been taken. The stock of visual aids used by the health visitors has been reviewed and some new ones added.

During the year 22 talks were given to Youth Clubs, Women's Institutes, Townswomen's Guilds, Young Wives' Clubs and St. John Ambulance Brigade Cadets. Three lectures on medical services were given at pre-release courses for men in H.M. Prison, Leeds.

During the exhibition in connection with accident prevention described above, health visitors assisted the Home and Child Safety Committee with a stand which showed "Home Hazards". Five members of the staff gave a repeat performance of their playlet "Home Hazards and the Health Visitor" at one of the conference sessions.

Ante-Natal Clinics and Welfare Centres.—Attempts to organise classes or discussions in clinics have met with varying degrees of success, partly because the mothers now have many sources of information, including the radio, television, magazines, the family doctor and the hospital ante-natal clinic.

Group teaching in welfare centres is hampered by unsatisfactory premises and the diversion of the mothers' attention by their children. Small groups in ante-natal clinics have seemed acceptable to the mothers and courses of talks have been given in three ante-natal clinics. Co-operation with the midwives in ante-natal teaching has been established and in two clinics the programme of talks has been shared.

Flannelgraphs showing the stages of pregnancy and labour are in general use. It is hoped to extend these facilities, but there is no doubt that it is individual advice and attention which the mothers most appreciate. The class or group is not a substitute for the unhurried discussion with a familiar health visitor.

Lectures to Students.—Talks and demonstrations to health visitor students on Heaf Testing and the testing of young children for deafness were continued. Lectures to student nurses at Leeds General Infirmary and St. James's Hospital were again given by the Health Visitor Tutor and the Superintendent Health Visitor; two health visitors attended discussions with the student nurses at St. James's Hospital, following their sessions of visiting with the health visitors, midwives and district nurses.

VENEREAL DISEASES

BY

R. D. CATTERALL, M.R.C.P.,

*Physician in Charge,**Department of Venereology,**The General Infirmary, Leeds*

The number of new cases of infection with venereal diseases continued to rise in Leeds during 1961 and is a cause of anxiety to all those concerned with these problems. It is now quite evident that a prosperous and stable society and years of peace and plenty are not in themselves factors of sufficient importance to eradicate these old enemies of mankind. The circumstances which have contributed to the present increase in the venereal diseases are still operating in society as a whole and show no signs of change. There is evidence that promiscuity is widespread and becoming increasingly frequent amongst young people. Movements of population and the continuation of immigration from abroad lead to stresses and strains producing promiscuity and infection. Prostitution is another factor which contributes greatly to the problem. Confirmed prostitutes are frequently unco-operative and usually do not respond to educational suggestions. They habitually default from treatment and follow-up and their attendances at the clinics are usually spasmodic and irregular. Undiagnosed and asymptomatic infection in women, who act as carriers of disease, present important problems in case finding and in diagnosis.

The number of new cases of gonorrhoea again showed an increase in 1961 over 1960. The rate of increase was less than in the previous two years but this is hardly a matter for much satisfaction. Multiple infections in the same patient continued to be an important problem, a small number of patients contracting the disease 6 or 8 times in the course of the year. Strains of gonococci relatively insensitive to penicillin continue to be found. This fact leads to the danger that, in patients who harbour such strains, the effect of treatment may be to

suppress the disease but not to cure it. Such patients may default from follow-up and spread the infection to others. Careful and prolonged follow-up to establish and confirm cure is, therefore, of very great importance in the cases of all patients treated for gonorrhoea. Prostitutes and immigrants contribute considerably to the total number of gonococcal infections, but the casual sexual contact remains the most important single factor. The incidence of gonorrhoea in young people is a measure of the promiscuity which occurs amongst them. The graph showing the ages of patients infected with gonorrhoea speaks for itself and requires no comment.

Non-gonococcal urethritis in men continues to be a common disease. The cause of this condition is still unknown, and many cases do not respond satisfactorily to treatment and are prone to relapse. In a small number serious complications occur which may lead to permanent disability. In women it does not produce easily recognizable symptoms or signs and the contacts of men with non-gonococcal urethritis are included in the figures under the heading of "other conditions". The number of women in this category increased again in 1961.

The incidence of early infectious syphilis remains low. In several other large centres of population in the country there have been significant increases in the number of new cases of infectious syphilis. These facts indicate the continued necessity for constant vigilance and careful investigation of patients who have run a risk of infection. The incidence of late syphilis slightly increased in the year under review and cases of cardiovascular and neurosyphilis with severe disability and impairment of health continue to be seen.

Once again there were no new cases of congenital syphilis in infants of less than one year and this is entirely due to the vigilance and thoroughness of the antenatal services of the city in performing serological tests on all pregnant women and referring all those found to have positive tests to the clinic promptly.

Many patients attend the clinic because they have run a risk of infection and wish to be sure that they have not contracted disease. The number of such patients continues to rise and accounts for some of the increase in the total of patients classified under "other conditions". In addition, many diseases which are not always acquired by sexual contact but may sometimes be passed from person to person venereally are included under this heading, such as scabies, pediculosis pubis, warts and other infectious diseases.

We are again grateful to our health visitors for their valuable work in contact tracing and case holding. The work of the Almoner's department has increased during the past year and has been most ably performed.

The incidence of the main venereal diseases continues to rise and the situation concerning the future remains uncertain. Education and providing accurate information about the venereal diseases will certainly have beneficial effects but the ultimate responsibility must rest with parents to educate their children and develop their characters. The problems of promiscuity and premarital sexual experience are social and moral and concern everyone who wishes to see a stable and healthy society.

NEW PATIENTS REGISTERED AT THE VENEREAL DISEASES CLINIC AT
THE GENERAL INFIRMARY AT LEEDS

	Year 1961		Year 1960		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis	51	30	41	29	+10	+1
Yaws	3	1	3	2	..	-1
Gonorrhoea	636	225	600	200	+36	+25
Non-gonococcal urethritis	336	..	330	..	+6	..
Other conditions	907	609	812	626	+95	-17
Total	1,933	865	1,786	857	+147	+8
Total attendances	11,820		11,301		+519	
Total No. of In-patient days ..	3,226		2,918		+308	

Details of new patients resident in Leeds registered during 1961 are given in the following table :—

LEEDS PATIENTS

	Year 1961		Year 1960		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early	1	..	1	3	..	-3
Late	39	26	25	21	+14	+5
Syphilis, congenital						
Under 1 year old .. ..	..	..	..	..	..	..
Over 1 year old	1	..	..	2	+1	-2
Yaws	3	1	3	2	..	-1
Gonorrhoea	552	191	531	170	+21	+21
Non-gonococcal urethritis	264	..	256	..	+8	..
Other conditions	662	496	601	517	+61	-21
Total	1,522	714	1,417	715	+105	-1
Total attendances	10,379		9,839		+540	

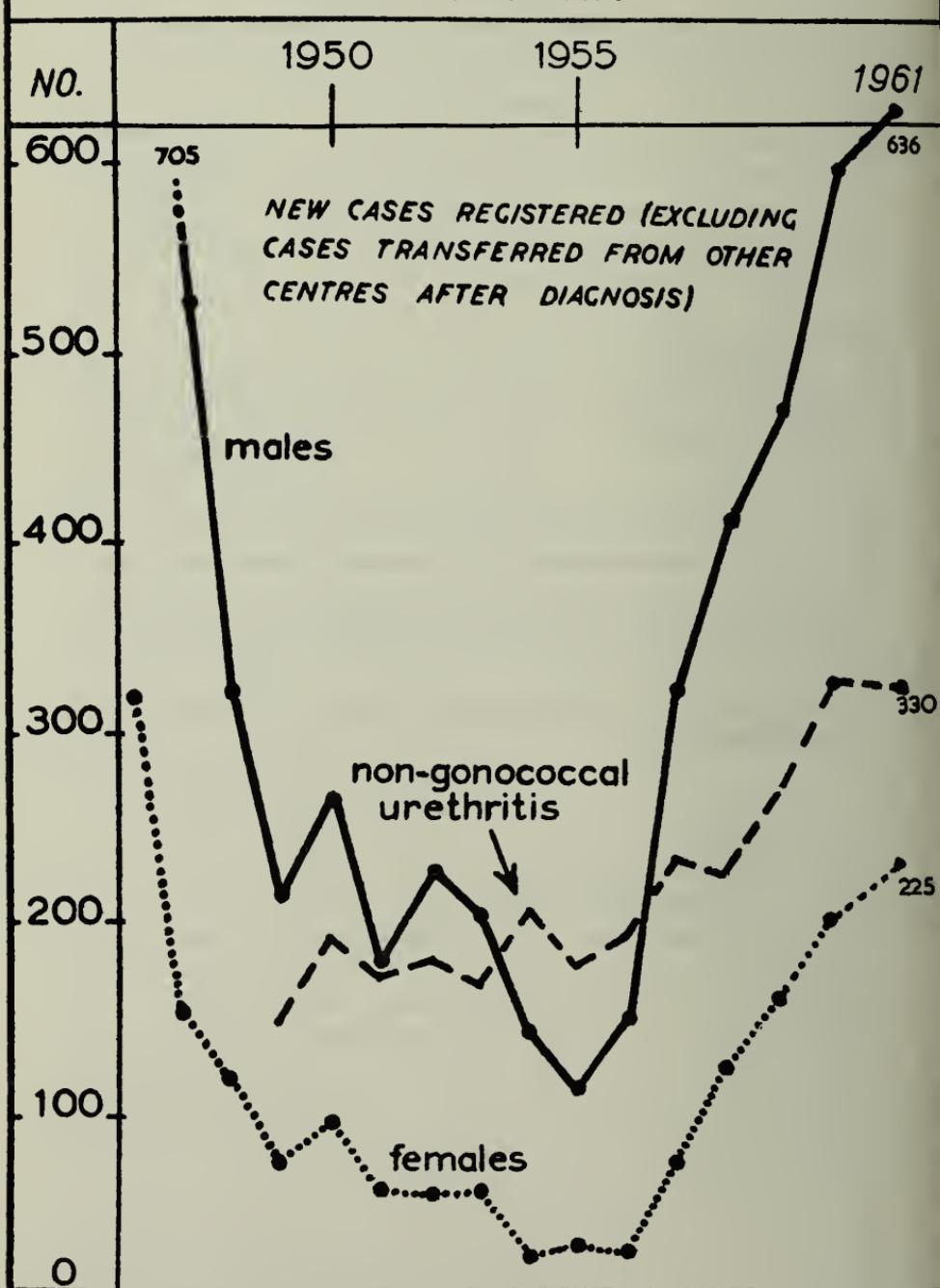
Patients suffering from a condition for which they have already received attention at a V.D. Centre are excluded from these tables.

Number of Leeds patients under treatment or observation at 31st December, 1961 :—

		Males	Females	Total
Syphilis .. ..	..	251	209	460
Yaws .. ..	..	12	6	18
Gonorrhoea .. ..	..	189	80	269
Non-gonococcal urethritis		88	—	88
Other conditions .. ..	..	170	121	291
Total .. ..	..	710	416	1,126

LEEDS

GONORRHOEA

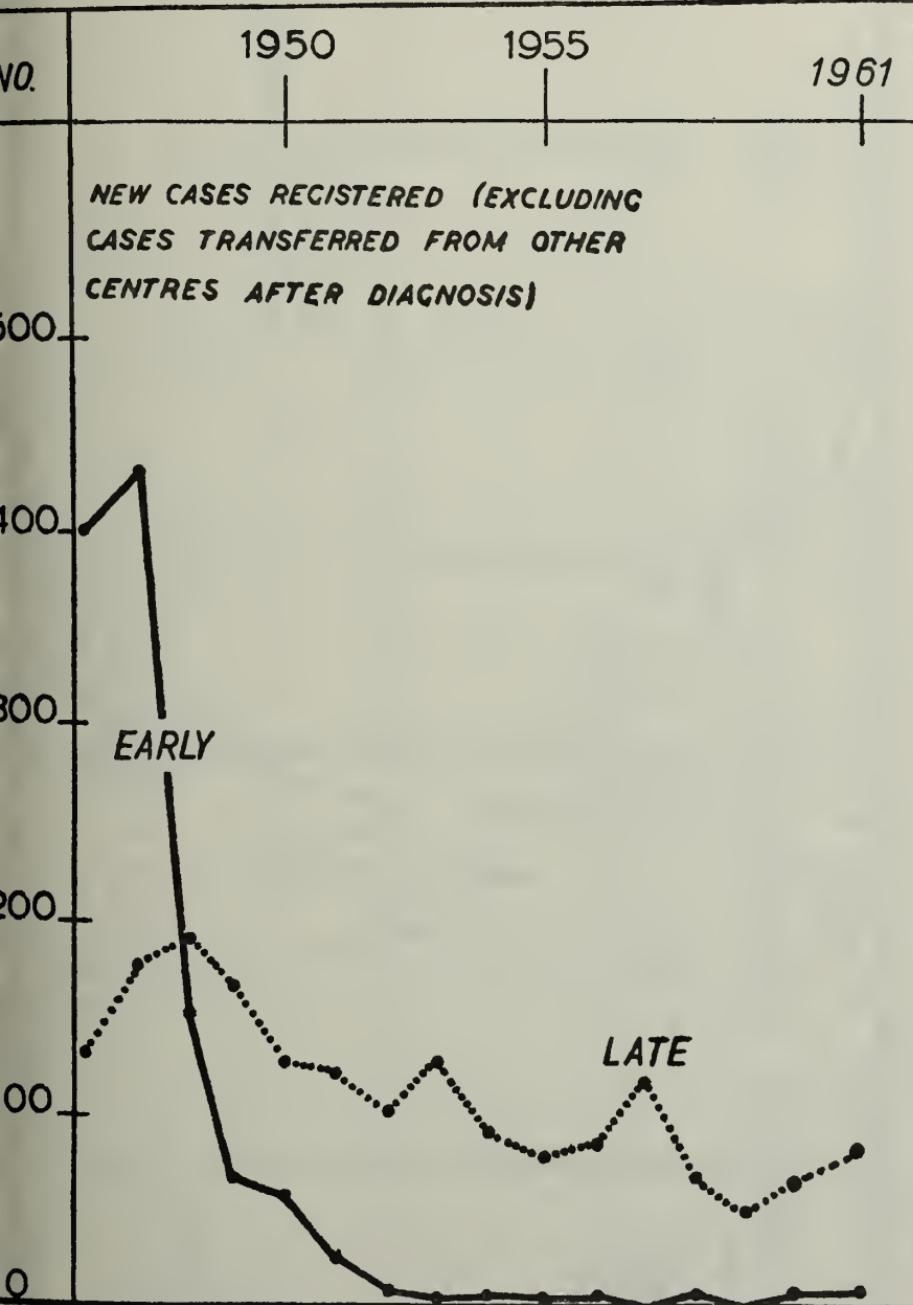


GONORRHOEA—Item 12 of Ministry of Health Form V.D. (R)

NON—GONOCOCCAL URETHRITIS—Item 20 of Ministry of Health Form V.D. (R)

LEEDS

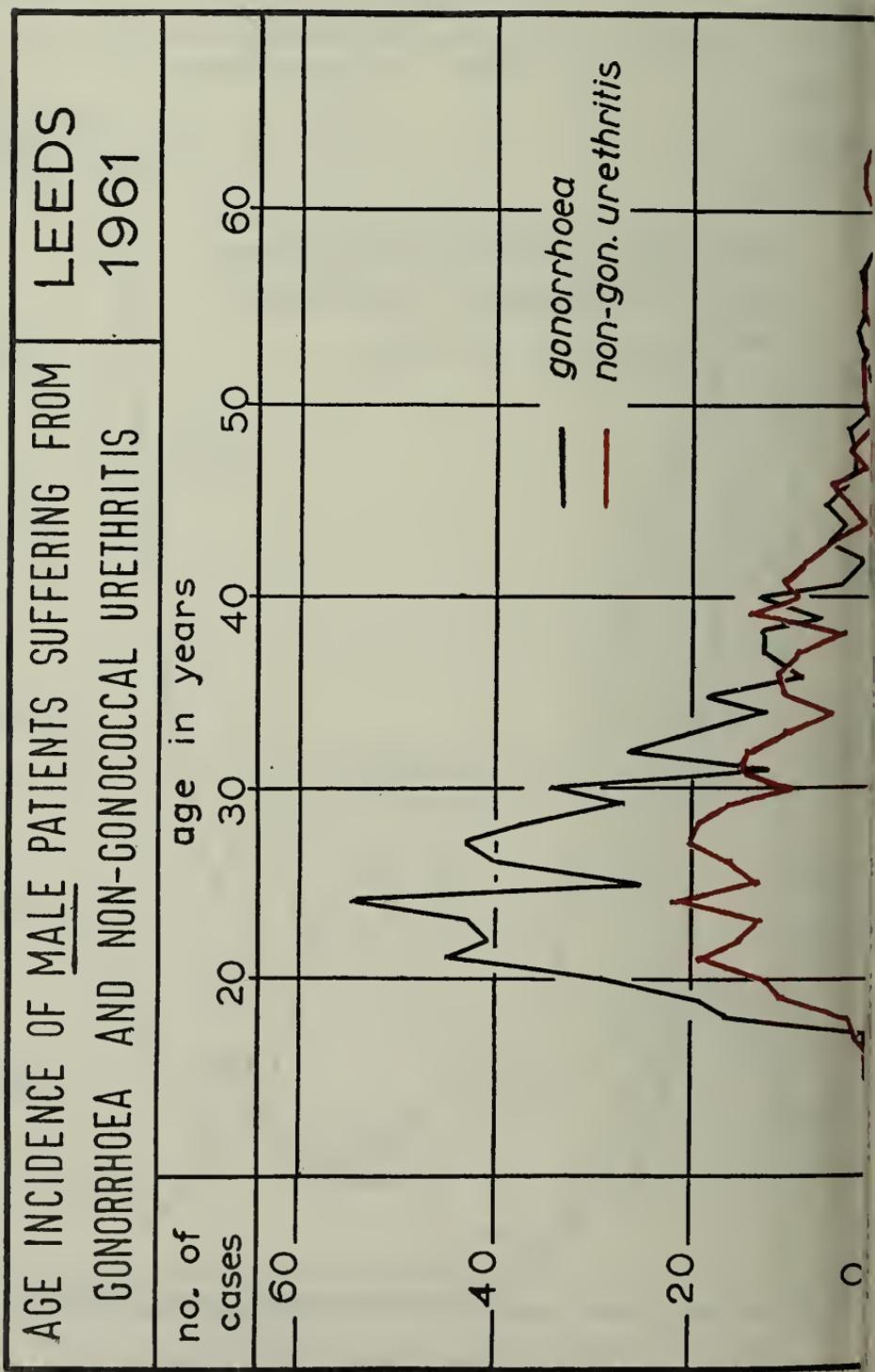
ACQUIRED SYPHILIS



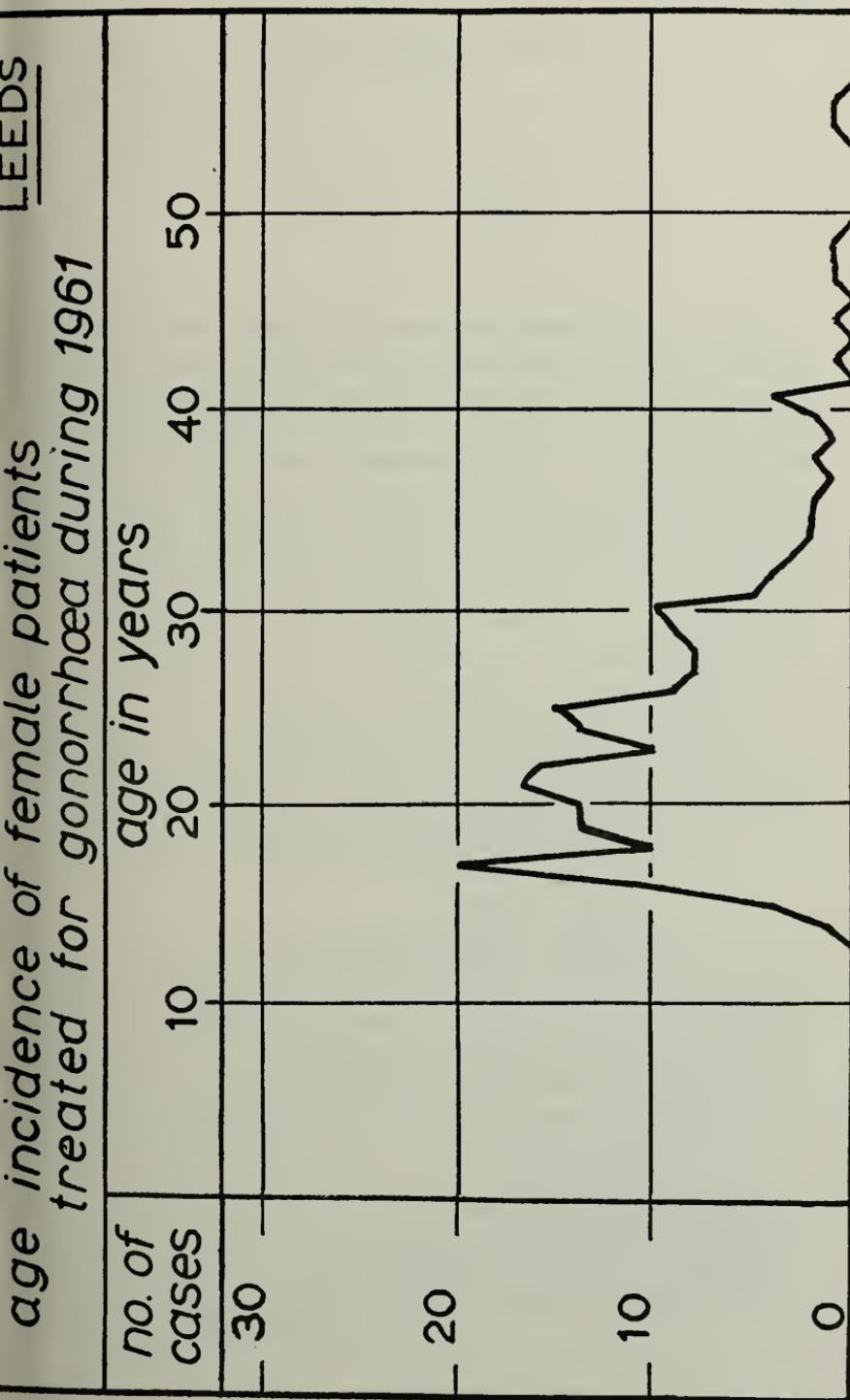
ACQUIRED SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

"Early" = Primary, secondary and latent in the first year

"Late" = All other cases



LEEDS
age incidence of female patients
treated for gonorrhoea during 1961



MEDICAL SOCIAL WORK
(General)

BY

ISOBEL B. PATON
Medical Social Worker

Type of Case dealt with.—During the year 180 cases were referred to the Social Workers by medical practitioners, almoners, National Assistance Board officials, probation officers and other social agencies. Letters to the Medical Officer of Health brought seven cases. Pre-admission visits for patients to the Geriatric Unit of St. James's Hospital were made. Many after-care patients were readmitted to hospital and referred again for follow-up ; these are not included in the new cases. Many of the cases required help in more than one category but the following table shows only one request per applicant.

Hospital cases :

After-care (geriatric)	St. James's Hospital	20
„ (acute wards)	„ „ ..	27
„ Leeds General Infirmary	..	34
„ Royal Bath Hospital, Harrogate	..	12
„ St. Mary's Hospital	.. ..	1
„ Public Dispensary	.. ..	1
„ Ministry of Pensions Hospital	..	7
„ Women's Hospital	.. ..	3
		—
		105

Visits re non-attendance at out-patients' clinic	.. .. .. ..	10
Matrimonial difficulties	.. .. ..	8
Clean Air Act problems	.. .. ..	7
Disposal of furniture	.. .. ..	6
Family social problems	.. .. ..	4
Housing	.. .. .. ..	4
Enquiries re nursing homes for the aged	..	3

Continued on next page

Requests for bedding ..	..	..	..	2
Financial difficulties ..	..	..	..	2
“ Meals on Wheels ” ..	..	..	..	2
Miscellaneous cases ..	..	..	..	27
				—
			180	—
				—

After-Care of Patients discharged from Hospital.—These patients are visited regularly and the Almoners informed as to their progress or deterioration. Their requests for home help, chiropody, spectacles, clothing; bedding, hearing aids, etc., are seen to. Where possible “ Meals on Wheels ” are arranged and information given regarding social clubs, competitions, and the like. One old lady won third prize in the Bulb Competition organised by the Old People’s Welfare Committee.

During the year 1,025 patients awaiting admission to the Geriatric Unit at St. James’s Hospital were visited. Patients and their families are advised by their general practitioner that they will be visited by a social worker. As well as a social history being obtained for the Geriatric Consultant, the social worker is able re-assure the patient and his family regarding pension books, personal belongings and other items required in hospital. Advice is given about National Assistance, the loan of medical requisites, rent books, etc.

From the month of January onwards, requests are made by families for temporary admission of chronic patients to hospital to enable those families to arrange for a holiday or a rest. This is greatly valued by families who have been nursing a chronic sick patient for a long spell. Not only does it allow families to go on holiday but it affords an opportunity to have the patient’s room cleaned and often decorated.

During the year, 722 visits were paid to new cases and 1,557 to old cases. 127 visits were received from new cases and 62 from old cases. 488 visits were paid to hospitals, the Magistrates’ Court and other social agencies in the city, and 72 visits were made for the Home Help Assessor.

Social Care of the Unmarried Mother.—During 1961, 218 women and girls having an illegitimate child were interviewed. In 155 cases it was the first child, in 39 the second, in 15 the third, in one case the fourth and in two cases the fifth. Six married women having an illegitimate child were referred for help and advice.

Of the 218 cases referred, 49 girls were to be married, 44 were returning from the hospital to their lodgings, 49 to their homes and 9 were returning to relatives or friends. Five girls were referred to the Roman Catholic Social Worker and four to the Church of England Social Worker. 21 girls were returning from hospital to live with the putative father and five girls hoped to marry later. Eight girls booked for a home confinement, 12 applied for admission to Mount Cross Home and 5 applied for admission to Browning House. Four girls applied for admission to homes outside Leeds. One girl was admitted to a mental hospital, two girls had miscarriages, one girl was later found not to be pregnant and four girls left the district.

All the girls attended the Department's Infant Welfare Centre in the district where they resided. Eight girls were helped to obtain affiliation orders. Several girls had not sufficient evidence to apply for summonses.

After-Care.—The after-care of girls who are admitted to a Mother and Baby Home is mostly done by the Matron and staff of the Home. Where possible the Senior Social Worker helps with lodgings for girls who cannot return to their own homes. The Senior Social Worker was asked to be a witness at a Register Office wedding of a girl who was helped in 1949.

General.—During the year the Senior Social Worker has attended the monthly meetings of St. Margaret's Committee and Mount Cross Mother and Baby Home. She has attended the quarterly meetings of the Leeds Council of Social Service Old People's Welfare Committee and the evening meetings of the Voluntary Workers. When possible she has attended the Epilepsy Association meetings. Both Social Workers attended meetings of the Social Workers' Club.

The "Yorkshire Evening News" donated 92 Christmas food parcels which were taken to housebound old people. These parcels are greatly appreciated by the old people, most of whom are ex-patients of the Geriatric Unit at St. James's Hospital.

Thanks are again due to the Editor of the "Yorkshire Evening Post" for toys and to the Women's Voluntary Service for clothing. The Social Workers would like to thank friends who have donated clothing, furniture, food and books ; these gifts have been greatly appreciated by the recipients.

CONVALESCENT TREATMENT

During 1961, 1,955 applications for convalescent treatment were received and 18 were brought forward from 1960, making a total of 1,973 as compared with 1,843 for the previous year. Of this number 1,422 were sent to convalescent homes, 540 applications were withdrawn or refused and 11 were held over until 1962.

The following table gives details of the number of adults and children sent for convalescence and the number of weeks per patient.

		Adults	Children
Number sent for convalescence	.. ..	894	528
Weeks away .. .. ..	.. .. ..	1,788	1,163
Extensions (weeks) .. ..	.. .. ..	4	..
Total number of weeks away ..	.. .. ..	1,792	1,163
Average number of weeks per stay .. ..	.. ..	2	2

A charge of £2 2s. is still being made to each adult person receiving two weeks convalescent treatment.

Provision for the health and comfort of the patients in all the Homes is of a high standard. The value of a period of rest away from home following an illness is seen particularly in cases who have been suffering from nervous strain.

During the year several children and adults were referred to the W.V.S. for help with clothing prior to going away for convalescence. The W.V.S. have also given valuable help with the escorting of children.

In many cases children have been accommodated for two weeks by the Care of Children Department and the Leeds Children's Holiday Camp to enable sick mothers to have a rest away from home.

During the year 136 mothers with 141 babies were sent to the Southport Home. The Ambulance Service has continued to provide transport for children and for mothers with babies. 138 adults and 468 children attended at the Central Clinic for medical inspection prior to admission to convalescent homes.

The allocation of patients to the various homes is shown as follows :—

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	163	141	7	311
Blackpool (Horncliffe) ..	237	..	20	257
Blackpool (Westwood) ..	103	..	20	123
Bridlington (Yorkshire Foresters) ..	83	..	6	89
St. Annes (Ormerod) ..	..	..	107	107
St. Annes (Blackburn) ..	102	..	..	102
St. Annes (Seabright) ..	202	..	..	202
Morecambe (Craig) ..	..	..	128	128
Southport (Milne) ..	2	..	..	2
St. Annes (Rochdale Home) ..	..	..	99	99
Southport (Jewish Home) ..	1	..	..	1
Harrogate (Metcalfe Smith) ..	1	..	..	1
Totals ..	894	141	387	1,422

The following table gives monthly statistics of cases sent for convalescence :—

	Adults	Mothers and Babies	Children	Total
		(M)	(B)	
January ..	13	..	5	18
February ..	25	..	12	37
March ..	58	7	36	108
April ..	76	13	46	148
May ..	85	19	38	161
June ..	111	28	38	206
July ..	92	17	49	176
August ..	87	18	38	162
September ..	114	17	42	191
October ..	67	17	54	156
November ..	25	..	8	33
December ..	5	..	21	26
Total ..	758	136	387	1,422

CARE AND AFTER-CARE (HEALTH VISITING)

BY

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)

Superintendent Health Visitor

The number of visits to the sick, aged and handicapped and for research purposes during 1961 was 4,660, slightly higher than in 1960 when the total was 4,601. Visits in connection with re-housing on medical grounds decreased from 906 to 849.

Tuberculosis Visiting.—All newly notified cases were visited and arrangements made for the examination of contacts. There was again a slight decrease in the number of households visited, which was expected following the decrease in the number of cases on the register. The number of tuberculous households visited in the past three years has been:—1959-6,739, 1960-6,605, 1961-6,464. The work of the eight health visitors attached to the Leeds Chest Clinic has not decreased, however, because they are visiting more patients suffering from non-tuberculous chest conditions such as chronic bronchitis and lung cancer.

During 1961, 1,748 skin tests of contacts were carried out by the health visitors.

Mental Health.—As in previous years, close contact with the staff of the Mental Health Section was maintained and there was frequent interchange of information.

Venereal Diseases.—Three health visitors continued to undertake part-time venereal disease visiting. The increase in the number of visits was less marked than in the two previous years, the total number (including 139 ineffectual visits) being 492.

The total number of visits for 1960 was 452. In 1958 it was only 94 and in 1959, 283.

Most of the patients have to be seen in the evenings or on Saturday mornings and many have complicated social problems which require much time and patience from the health visitor concerned.

Special Surveys.—During the second half of the year, health visitors carried out visits in connection with the Medical Research Council Survey of enteroviruses and pathogenic bacteria in the faeces of normal children.

The difficulty of assessing the amount of time spent by health visitors on "care and after-care" visits has been the subject of comment in previous Annual Reports. It has long been recognised that although, numerically, these visits only make up about 8 per cent. of the total, they probably consume much more than 8 per cent. of the health visitors' time. It has also been obvious that present methods of recording do not give a true picture of the work done. It was therefore agreed that an investigation into the work of the health visitors should be made.

Discussions with the health visitors began in May and, with their enthusiastic co-operation and the guidance of Dr. A. N. McPhail, Honorary Assistant Medical Officer of Health, a pilot survey was undertaken in August. This showed that a great deal of valuable information could be obtained, not only about health visiting, but also about social conditions in Leeds. After further discussions and adjustments to the forms used, the full survey took place during the fourth week of October. All the health visitors on duty took part and a form was completed for each of the 2,500 people visited during the week. Each health visitor also completed a daily summary of her work. All the checking and coding, which followed, was undertaken by members of the staff, some of whom worked in the evenings at home. The whole survey was only made possible by the health visitors' cheerful acceptance of the extra work it entailed.

A random sample of 1,000 forms was picked from the 2,500 and the City Treasurer kindly undertook the analysis of these in the Hollerith Section of his Department.

At the end of the year it was apparent that the time and effort spent on the survey had been fully justified and that the results could affect future policy in the health and social services. A full report is being prepared and is expected to be available in 1962.

CHIROPODY

During the year the Chiropody Service continued to expand, 1,083 applications for treatment having been received. 35 of the applications were cancelled and 339 applicants were awaiting appointment at 31st December, 1961.

Two more part-time chiropodists were employed bringing the number employed to two full-time and four part-time providing 33 treatment sessions per week at 6 centres and 6 home treatment sessions. 1,879 patients were receiving treatment ; a total of 1,671 sessions were worked during the year providing 10,310 treatments. The average time between treatments is six weeks but some patients need and receive more frequent treatment.

In April voluntary workers from the Leeds Council of Social Service commenced helping at centres where patients are brought in by car transport. They are a great help to the chiropodists, assisting the patients and carrying out reception duties. Their help enables the chiropodist to treat 8 patients in one session as compared to 7 treatments without help.

The service is still restricted to the three priority groups, i.e. old people, the physically handicapped and expectant mothers referred by their family doctors. Not many expectant mothers have applied for treatment but those who do apply are given early appointments if possible.

An increasing number of patients who initially attended the centres for treatment have had to be provided with transport or home treatment as their health fails.

In the table below details are given of the applications received and how they are dealt with.

No. of patients receiving treatment at 31.12.60	1,409
No. awaiting appointment at 31.12.60	12

1,421

Continued on next page

Applications received during year

Pensioners referred by general practitioners..	1,029
Physically handicapped under pensionable age referred by general practitioners ..	35
Expectant mothers referred by Maternity and Child Welfare doctors	6
Expectant mothers referred by general practitioners	5
Referred by War Pensioners Welfare..	3
Referred by Welfare Services Department ..	3
Referred by Mental Health Section	1
Referred by Leeds General Infirmary ..	1
	—
	1,083
Total	2,504
	—

Disposal

Attending clinics by own means of transport	1,350
Attending clinics by transport provided ..	312
Receiving domiciliary treatment	217
Number awaiting appointment	339
Applications cancelled	35
Died or withdrawn	251
	—
	2,504
	—

Chiropody treatment is provided at the following centres:—

Central Clinic Annexe, Park Square, Leeds, 1.

Holbeck Maternity and Child Welfare Clinic,
Nineveh Road, Leeds, 11.

Welfare Services Centre, 79, Roundhay Road, Leeds, 7.

Leafield Maternity and Child Welfare Clinic,
King Lane, Leeds, 17.

Middleton Maternity and Child Welfare Clinic,

Middleton Park Avenue, Leeds, 10.

Balks House Maternity and Child Welfare Clinic,

Walkers Lane, Dixon Lane, Leeds, 12.

SECTION 29

HOME HELP SERVICE

BY

Mrs. DOROTHY W. ALFORD

Organiser

At 31st December, 1961, the Home Helps numbered :—

Whole-time	..	..	68
Part-time	..	..	254
			—
			322

During the year 3,699 applications for help were received. Of these, 2,747 cases received help. 952 cases were withdrawn ; reasons for withdrawal were :—(i) death of the patient, (ii) removal of the patient to hospital, (iii) private arrangements having been made in the meantime for the care of the patient, (iv) cost of the proposed service and (v) emergency over before help could be provided.

The cases which received help are classified as follows :—

Maternity (including expectant

mothers)	..	..	..	470
Chronic sick, aged and infirm	..	..	1,533	
Other cases (hospital discharges, emergency illness, etc.)	..	..	712	
Tuberculosis	..	..	..	32
				—
				2,747

N.B.—Each case is counted only once, although help may have been provided intermittently from January to December.

The cases helped were brought to the notice of the Home Help Service by the following :—

Blind Welfare Department ..	76	(2·8%)
Welfare Services Department ..	263	(9·6%)
Hospitals	353	(12·9%)
General medical practitioners ..	486	(17·7%)
District nurses, midwives, etc. ..	134	(4·9%)
Chest Clinic	10	(0·4%)
Mental Health Services, W.V.S., Church workers, National Assistance Board, relatives and members of the public ..	1,425	(51·9%)

HOURS GIVEN TO CASES HELPED DURING 1961.

MONTH	TYPE OF CASE								Total
	Maternity	Old Age Pensioners	Blind	Emergency Illness	Hospital Discharge	Chronic Sick	Tuberculosis	Nights	
Jan. ..	1,964	13,118	1,212	1,760	2,772	6,632	796	108	28,362
Feb. ..	1,648	12,012	1,144	1,604	2,740	6,407	804	8	26,367
March ..	2,575	17,576	1,480	1,820	3,500	9,072	1,050	..	37,073
April ..	2,008	12,696	1,032	1,600	2,556	6,668	776	20	27,356
May ..	2,535	17,685	1,420	1,765	2,975	8,772	945	135	36,232
June ..	1,782	14,260	1,188	1,783	2,379	7,650	669	..	29,711
July ..	1,932	14,208	1,372	1,660	2,320	7,348	668	..	29,508
August ..	1,415	14,886	995	1,375	2,545	7,166	645	10	29,037
Sept. ..	1,776	14,193	1,168	1,568	2,552	7,436	684	..	29,377
Oct. ..	2,552	14,627	1,268	1,840	2,136	6,792	828	..	30,043
Nov. ..	2,170	19,524	1,385	1,890	3,100	9,175	955	50	38,249
Dec. ..	2,104	13,701	956	1,244	2,180	6,369	688	88	27,330
Totals ..	24,461	178,486	14,620	19,909	31,755	89,487	9,508	419	368,645

More cases have been helped during 1961 than in previous years and fewer hours given per case. More part-time Home Helps have been employed than full-time. It has been found preferable to employ more part-time home helps for shorter hours rather than fewer full-time helpers. The aged and chronic sick often require short visits and a full working week made up of many such cases has proved too great a strain for full-time workers and the sickness rate has risen. Part-time workers are better able to cope with smaller numbers of these heavy cases.

Thousands of initial and follow-up visits have been made in 1961 and twelve/thirteen hundred cases per week received weekly help of from 8 to 42 hours. The largest number of cases has been the aged and chronic sick. Hygiene plays a big part in the work of the Home Helps in these cases ; so often nursing is not required but nail cutting, hair shampooing, supervision and help with bathing is very necessary. It has been found that many of the aged will allow a home help to assist them in this way but would not allow a relative to help. It is no use keeping the home clean if the old person is neglected and so often they lose their self-respect and interest when lonely. The interest, care and friendly banter of the Home Help is looked forward to and appreciated, and the mental outlook noticeably improved. The service provided by the provision of a Home Help is, in many cases, of as much value mentally as domestically.

Mental and Problem Cases.—These cases are on the increase. Continuity of help is necessary in problem cases to gain the patient's confidence. It is not easy to find the right woman for the case as, naturally, the Home Help tires of creating order from chaos only to find, if it is necessary to leave the case for a few days, that the family is in a state of chaos again on her return.

Maternity Cases.—The trend is for maternity cases to decrease and the cases of the aged to increase. Many of the maternity cases are being discharged after 48 hours hospital care and these require help in the home for a further spell.

Night Help.—There has been little call for night help during the period under review. Day help has been given in many cases where night help has been supplied by relatives until a hospital bed could be provided.

Tuberculosis.—30 cases of tuberculosis received help.

SECTION 51

MENTAL HEALTH SERVICES

BY

J. M. MCALPIN, M.B., Ch.B.,
Medical Officer of the Mental Health Services

AND

R. PERRY
Mental Health Officer

INTRODUCTION

The service is administered by a Mental Health Sub-Committee consisting of five elected representatives and three co-opted members having experience of the work. Meetings are held monthly.

It is with great regret that we record the death of Alderman Z. P. Fernandez, M.D., D.P.H., who was Chairman of the Sub-Committee for many years. Alderman Fernandez was one of the founders of the service. He was well known as a speaker on mental health topics and always took a keen interest in every aspect of the work.

We also regret to report the death of Mrs. Glynn who for many years had provided a home for mentally handicapped youths and men. Her daughter, Mrs. Maguire, is carrying on the good work.

During 1961, further steps were taken to complete the integration of the administrative and clerical work of the Section with the main body of the Health Department. In December the Section abandoned its former offices at 25, Blenheim Terrace and moved into accommodation at East Parade. This has led to some overcrowding of offices which cannot be remedied until accommodation for some of the Mental Welfare Officers becomes available at St. James's Hospital,

MENTAL SUBNORMALITY

The Junior and Senior Training Centres and Sheltered Workshops are described in subsequent paragraphs. The city has an adequate number of places at these centres and some children from the neighbouring areas of the West Riding are accepted.

Three Mental Welfare Officers devote the greater part of their time to the community care of the mentally subnormal.

One Mental Welfare Officer undertakes general supervision of the residents in the Armley Grange Hostel for subnormal women, opened in June, 1961.

The number of subnormal and severely subnormal cases reported during the year and the numbers on the registers at the close of the year are shown in Tables II and III of the Appendix.

Patients in Hospital.—Admissions to hospital are informal wherever possible and compulsory procedures have been used very infrequently in dealing with the severely subnormal and in their much more limited application to the subnormal. It is too early to express an opinion on the working of the Mental Health Act, but there appear to be occasions when higher grade subnormal patients do not receive the treatment they need because compulsory powers no longer apply to them. The number of patients in hospitals for the mentally subnormal at the end of the year was 467 males and 423 females, a total of 890, of that number 772 were informal patients, the remainder, 118, being compulsorily detained.

The number of patients on the waiting list for hospital admission at the close of the year was 10 males and 12 females. At the beginning of the year 7 male and 6 female patients who had been on the waiting list for a considerable period were admitted to new accommodation provided at Fielden Hospital, Todmorden, thus reducing the number on the waiting list considerably. Since then, however, the number of new patients added has had the effect of again increasing the number of patients awaiting admission. Most of these cases are severely subnormal children under 16 years whose presence in the home causes considerable distress to other members

of the family, but unfortunately there appears to be little prospect of hospital accommodation of a permanent nature being available in the near future, and the only alternative is to endeavour to provide short stay accommodation from time to time, either in hospital or our own short stay hostel. During the year 83 male and 55 female patients have been provided with this type of accommodation.

Guardianship.—During the year only two new cases were admitted to the guardianship of the Local Health Authority, one transferred from hospital and one dealt with pursuant to Section 33 of the Mental Health Act, 1959. The total number under guardianship at the end of the year was 6 male and 1 female patient.

A number of male patients are still living in approved lodgings, and are visited weekly by a Mental Welfare Officer to assist them with their finances. Many of these patients have substantial savings accounts for providing clothing, holidays, etc.

Supervision.—The number of cases receiving informal supervision at the end of the year, excluding patients attending training centres, was 221 males and 138 females, a total of 359.

Holidays.—A party of 17 patients was again taken on holiday to Scarborough under the supervision of a Mental Welfare Officer and a pleasant week was enjoyed by the patients. Our thanks are again due to the proprietor of the boarding house in which they were accommodated for her sympathetic understanding, although she readily admits that the behaviour of the patients was beyond reproach.

In addition, day excursions were provided for all the patients attending the training centres.

Training Centres.—The number of patients attending the training centres and sheltered workshop at the end of the year was 433 (Table IV), including 37 from the West Riding area.

At the end of the year 35 cases (18 males and 17 females) were awaiting admission.

Film.—The Committee's film "Towards a Happier Life" has again been in fairly heavy demand by various organisations and a total of 45 bookings has been made.

TRAINING CENTRES AND SHELTERED WORKSHOPS FOR THE MENTALLY SUBNORMAL

East Leeds Training Centre (Mrs. G. Jones).—The total number on roll at the year end was 116. The above number included one boy over 16 years and 4 West Riding County Council cases. During the year 19 children left and 14 were admitted.

The Ladies' Section of the Licensed Victuallers' Association arranged through the Parents' Association to take 11 of our children and one member of the staff on a day trip to Scarborough. A group of younger children and some of the staff went to Wharfe Grange, Wetherby; the Matron kindly allowed them the use of the dining room, where they had their packed lunch, and later she and some of her staff accompanied them to the playing fields where everyone had a most enjoyable time.

The older children and staff had a coach outing to Filey. It was a great success. The Clerk of the Council allowed the use of the room, as last year, where the children had their packed lunch. Ice-cream and sweets were provided by the Parents' Association for both outings.

The Parents' Association arranged for Harry Corbett to entertain the children with "Sooty". The Association also provided a grand display of fireworks and the children greatly enjoyed the "parkin pigs" which were sent by the parents.

The Rev. G. A. M. Adams of Seacroft conducted the Harvest Festival Service. Gifts of fruit and flowers were sold later and the proceeds went to the funds of the Parents' Association.

At the Open Day six of the classes gave a display of country dancing and movement to music. Christmas novelties made by the children were on display.

The Rev. G. A. M. Adams again took charge of the Christmas Service and Nativity Play. The cassocks and surplices worn by the choir boys in the play were kindly loaned by his church.

The Christmas Party was held. Mr. Fell, the father of one of the children brought ice-cream to the Centre for every child and member of staff. Each child was thrilled to receive from Father Christmas, a carrier full of presents kindly given by the Parents' Association, West Yorkshire Foundry, "Yorkshire Evening Post", and the drivers of the cars. We were indebted to the drivers for altering their timetable and agreeing to call two hours later than usual to collect the children.

We are grateful to the Parents' Association for the gift of gardening tools which are used by the children to cultivate a garden in front of Nowell House.

The highlight of the year was that out of the 19 children who left, 4 went on to E.S.N. School.

Stanningley Junior Training Centre (Miss I. Bye).—The year closed with 105 on the register; 61 boys, 44 girls. Of these, 10 are West Riding children, 4 boys, 6 girls.

During the year one West Riding child has left the district. Two girls have been transferred to Armley Grange. Three boys have been transferred to North Leeds Centre. One boy is having a trial at Bridge House School for Deaf Children. One boy is having a trial period at Larchfields E.S.N. School for Spastic and Physically Handicapped Children. Three girls and one boy have been transferred to institutions for residential care. Two boys have deteriorated to such a degree as to necessitate home care. Two boys and one girl have died.

In February a party of children were taken to the pantomime, the outing being provided by a local firm. This was very much enjoyed.

Again, Messrs. Woolworths of Pudsey presented us with a giant Easter Egg weighing 12 lbs. This gift provided a treat for days.

Due to the interest of some members of St. John's Ambulance Brigade, a typewriting firm has presented us with two second-hand typewriters for the use of spastic children who cannot use pen or pencil.

The annual trip to Filey was again much appreciated and enjoyed. In addition to this, 11 children from this Centre along with children from the other centres were taken by the Ladies Section of the Licensed Hotel Victuallers Association, to Scarborough for the day, and were given a wonderful time. Many thanks are due to the organisers.

In September we had an interesting visit from Miss Edith Pitt, M.P., Parliamentary Secretary to the Ministry of Health.

We continue to have deputations from other Local Authorities, also students for periods of practical work from the National Association for Mental Health. We have also had visitors from overseas, students from hospitals, colleges, nursery schools and health visitors, etc., all of whom are very much impressed by the work of the children.

The Parents' Association continues to be active. A very successful Christmas Fayre was held in November, the Openers being two of I.T.V.'s stars. The Association has bought us a new "walking trainer" and some classroom equipment.

A new coat of paint has been given to some of the classrooms and corridors, and the result is very pleasing.

The Christmas Party was again a happy event. The presents were again provided by the "Yorkshire Evening Post".

Medical Care of Children in the Training Centres (Dr. I. M. Holoran).—Routine medical inspections of the children who attend the training centres are carried out every two years. Any child who has any physical defect requiring treatment or observation is reviewed at least once a year. It is important to make quite sure that children unable to respond to the usual methods of testing vision and hearing are tested by simplified methods such as those suggested by Dr. Mary Sheridan until a reliable result is achieved. A visual or aural defect which has not been discovered and remedied as far as possible is likely to impede still further the child's developmental progress. Parents are invited and the staff of the centre join with the School Health Service doctor in a consideration and assessment of the child as a whole and of his family relationships.

In addition to the above arrangements the School Health Service, through its orthopædic team continues to advise on the management and treatment of the cerebral palsied children attending the centres. Any others who have orthopædic defects are seen at the same time. During these clinics the childrens' progress can be discussed and any re-assessment that seems advisable can be planned.

Dr. Holoran has paid four visits to the centres during the year and on two occasions Mr. J. M. P. Clark, F.R.C.S., our orthopædic consultant, has visited the Stanningley Centre along with Dr. Holoran. Four chairbound children have been recommended for operative treatment in order to make the nursing problems they present less difficult.

The following table shows the distribution of these dually handicapped children :—

	Severe Cerebral- Palsied Children	Mildly Cerebral- Palsied Children	Children suffering from other orthopædic defects	Total
Stanningley Centre	13	16	7	36
East Leeds Centre	2	13	4	19
Receiving therapy at home	3	—	—	3
	18	29	11	58

At the Stanningley Centre, 14 of the children are chairbound, and 17 are incontinent.

Mr. Hunt continues to do valuable work as full-time remedial gymnast at the Stanningley Centre. Five children from the East Leeds Centre receive physiotherapy at the nearby school clinic.

North Leeds Training Centre and Sheltered Workshop (*Mr. H. Wardman*).—The training centre commenced the year with 107 Leeds and 26 West Riding cases. During the year 8 new Leeds cases were admitted, and eleven were re-admitted. Twenty-four cases in all left the Centre and Workshop, of these 14 obtained outside employment, 12 from the Centre and 2 from the Sheltered Workshop; four of these returned and are included in the re-admittances. One boy was transferred to an E.S.N. School, one removed to another town. Three were admitted to hospital, three died, and three West Riding cases were withdrawn.

The Sheltered Workshop maintained its output of over half a million components fettled and assembled and the income derived from this work was over £4,000. The rates of pay increased slightly, varying between 2/7½d. to 3/2½d. per hour, working a 42 hour week. The concrete section also kept up production of concrete covers for the Leeds Parks Department and also increased numbers of edging stones and two foot square slabs, making an income of over £600.

The Training Centre is still carrying on with all forms of hand-crafts and we have recently introduced part-time work for the Funeral Directors Supply Company, including various forms of assembly work, sand papering and counting and packing of articles. The boys engaged in this work receive the whole of the income by way of bonuses. Unfortunately, the supply of work is insufficient as yet to provide full-time work.

The woodwork department continues to undertake the work of renovating toys for the Health Department Nurseries and production of stool frames for use in the Centre. We have also built a greenhouse for use in the gardens and a second one is being built for a private order. Display frames were also made for the Health Department.

Our sales of work produced in the other sections of the Centre are still being maintained. The transitional class for the junior boys is proving a great help in training younger boys for transfer to the Adult Training Centre. The training received in this class helps the boys to accept more easily the Adult Training Centre.

The Centre's football team is still playing well, winning and losing in turn to various hospital, school and youth teams. We have to thank the Parents' Association for the gear provided for our team which enables them to turn out very smart and clean.

The lads were again taken to Filey for our annual trip and an enjoyable day was spent at the seaside. .

Another innovation this year was the visit to the pantomime for which we have to thank the Parents' Association who made the visit possible by providing the tickets and buses for transport.

Armley Grange Senior Training Centre (Mrs. K. Taylor).—There are 52 patients on the register, of these 44 are severely sub-normal. Apart from the cook and one kitchen assistant, the domestic work is done by the patients and is quite an important part of the curriculum. Many of the girls now give useful help in their homes. Visitors to the Centre comment on the high standard of the hand-crafts and there is always a waiting list in the order book. Revenue from handwork for this year was over £150.

The attendance has been very high ; the average for the year being 90 per cent. During the year, staff attended a six weeks course on " New Ways and Methods of Physical Education ", also various lectures appertaining to the work in a training centre. The Supervisor completed a course at Leeds University on " The Teaching of Backward Children ", and also attended the Annual Conference of the National Association of Teachers of the Mentally Handicapped.

We had a very enjoyable outing to Bridlington in June, with ideal weather, and a most successful 21st birthday party in November. This was followed by the Parents' Christmas Party early in December, and on the 20th December the Centre was packed to capacity for the Annual Christmas Concert and Sale of Work. Handwork and Christmas Decoration Stalls sold out very quickly, and many orders were taken. As always the year closed with the Christmas Dinner Party on 21st December, 1961.

Pioneer Laundry (*Mrs. Wager*).—This Centre now has 32 girls and women fully employed. Each is paid according to ability, up to the standard commercial rates, and they are therefore able to contribute to their own support. They each receive a free mid-day meal and travelling tokens. Approximately 10,000 articles are laundered here weekly and a good standard is maintained.

This year three girls were taken on a week's holiday to Cleethorpes under the supervision of a member of the staff; the girls are encouraged to save their money for this holiday. The whole staff have an annual visit to the seaside in summer and a visit to the pantomime in winter.

There has been a very good attendance throughout the year and very little absence due to illness.

HOSTELS FOR THE MENTALLY SUBNORMAL

Armley Grange Hostel (*Mrs. Petty*).—This hostel of 24 beds for subnormal girls and women was formally opened by the Chairman of the Health Committee, Alderman Mrs. W. Shutt, on 1st May, 1961.

There were 17 girls and women in residence at the end of the year. Of these, nine go out to work and are fully self-supporting, three assist with domestic work in the hostel, two are awaiting employment and three are elderly and infirm and unsuitable for employment.

All have settled happily into the routine of the hostel and appreciate the comfort and freedom of their new surroundings. The girls in regular employment have saved a considerable sum of money towards a seaside holiday next year.

Nowell House Short Stay Home (*Mrs. G. Jones*).—During the year 124 children were admitted; included in this number were 22 children from other authorities.

MENTAL ILLNESS

Admissions to Hospital (*Mr. T. S. Hawkesworth*).—Admission procedures continue to form a substantial part of the Mental Welfare Officers' duties. Though informal admission is the means of choice, there is a considerable number of patients to whom compulsory measures must be applied. In most cases, these procedures are initiated by the Mental Welfare Officer at the request of the family doctor, who is usually willing to sign one of the medical recommendations. The Mental Welfare Officer concerned then obtains a second medical recommendation where indicated, calling out one of the specialists approved for this purpose by the Local Authority. A rota of four Mental Welfare Officers undertake night duty ; this is at present done by the men.

It is impossible to give a complete picture of the number of Leeds patients receiving treatment in hospitals for mental illness, as the mental hospitals do not inform Local Authorities of direct admissions. I can, therefore, only give particulars of cases dealt with by the Department as per Table I of the Appendix.

Although patients are admitted wherever possible on an informal basis, it was found necessary in 1961 to deal with 308 cases on short term Compulsory Orders under Sections 25 and 29 of the Mental Health Act, 1959, and 94 on Treatment Orders under Section 26. These figures show little variation from comparable figures of 1960 when 296 patients were admitted under Section 20 of the Lunacy Act, 1890, and 33 under Sections 25 and 29 of the Mental Health Act, 1959, and 88 under Section 16 of the Lunacy Act, 1890 and Section 86 of the Mental Health Act, 1959.

In all, we were concerned with the admission of 868 patients and of this number 333 were admitted to the Psychiatric Unit, St. James's Hospital, and the remaining 535 to the various Mental Hospitals.

For years it was the practice in Leeds to admit the majority of patients suffering from mental illness for a period of observation to St. James's Hospital but now, owing to lack of accommodation and change of policy there, more patients are admitted direct to Mental Hospitals ; the figures show that the numbers of compulsory admissions to mental hospitals from Leeds have more than doubled.

Calls out of normal working hours have greatly increased and on most days the officer on duty is called upon to act in some emergency. Frequent calls are also made on our services by the mental hospitals to check on patients absent without leave, etc., and to return them to the hospitals.

Good liaison has been maintained with the Consultant Psychiatrists in the various hospitals and although difficulties do arise at times about the availability of beds, no urgent case has been refused.

Psychiatric Care and After-Care (*Mr. V. J. G. Bosworth*).—The Psychiatric Social Worker and five Mental Welfare Officers undertake the after-care of patients discharged from mental hospitals and the out-patient social work of the Psychiatric Unit at St. James's Hospital. Duties at this Unit are shared between the Psychiatric Social Worker employed by the Regional Hospital Board and our officers.

The Psychiatric Social Worker undertakes general supervision of the residents in the Rutland Lodge Hostel for post-psychotic patients. The Psychiatric Social Worker and Mental Welfare Officers take part in the general preventive and educational services of the section.

One member of the staff retired at the end of the year after a prolonged illness, and one left on marriage early in the year. Two mental health workers joined the Section, one from another section of the Health Department in April, and one in November from the mental nursing field.

Through sickness, the Section lost one-seventh of its working capacity this year, a fact which should be borne in mind when examining the figures for the year. Though nine workers were concerned in the work of the Section at the end of the year, three are also concerned with subnormals and another two with arranging admissions to hospital. The remaining four have no other commitments outside the Section.

The Section works in close co-operation with the Psychiatric Unit staff at St. James's Hospital. Through careful liaison with the Hospital Psychiatric Social Worker overlap has been prevented. Two meetings have been held between psychiatrists and mental health workers, the purpose of which was to clarify the duties and responsibilities of the Section to the Unit and to make adaptation where possible to fulfil these duties more efficiently. A suggestion has been made that specific workers be attached to each of the three "firms" or "teams" of psychiatrists at the hospital. This is to be implemented and will prepare the way for provision of premises for the use of the Section at the Hospital Unit in approximately a year's time. At these meetings a decision was made to make the Section largely responsible for out-patient work, leaving everyday in-patient problems to the hospital psychiatric social worker, who is on the spot. The decrease in hospital interviews reflects this change in allotment of the work. (1961, 428; 1960, 683). It is, however, agreed that patients should always see the same social worker wherever possible, whether at home or in hospital. There has been an increase in the number of reports prepared as an aid to diagnosis, (1961, 92; 1960, 59). A room has been set aside for the use of mental health workers visiting the hospital, and workers are invited to clinical meetings held fortnightly.

Every worker in the Section is responsible to the doctor in charge of each case, whether he be the specialist or the general practitioner, and has a duty to keep the doctor informed of progress. The role of a mental health worker differs in this respect from that of other social workers. To conform to this obligation, duplicate reports of interviews are submitted to the psychiatrist in charge of the case. It is also customary for the department to approach only those cases referred by the specialist in the field. Where patients approach the department direct, it is usual to explain this obligation to them and contact either the general practitioner or psychiatrist. In rare cases where this is not possible, the Assistant Medical Officer of Health is notified.

In spite of staff shortage there was an increase in the number of cases dealt with (1961, 1,109; 1960, 825), but the number of visits and interviews has remained approximately the same. Therefore,

the preventive aspect of the work (regular visiting) has had to be curtailed slightly. Again, a request for half as many social reports again as last year added to the Section's pressures. The figure for new cases referred remains almost the same as last year, but there has been an increase in cases previously referred (1961, 805; 1960, 522). The total cases interviewed comprise 284 men and 725 women. By far the greater proportion of patients are seen at home. The ratio of home visits : officer interviews : interviews at the Psychiatric Unit is : 9 : 2 : 1. Most new cases are referred from the psychiatric teams at St. James's Hospital (153). New referrals from mental hospitals (mainly Menston) are also a large group and have increased by half on last year, (1961, 69; 1960, 45), and this increase reflects the discharge of patients to Rutland Lodge Hostel. The Senior Psychiatric Social Worker visits the hostel weekly to discuss cases with the Warden, and is responsible for supervising the discharge and admission of patients, and ensuring a quick referral to the psychiatrist, where necessary.

A tentative assessment has been made this year of the type of work and patient the Section is concerned with. Out of a total of 489 cases examined, 150 were found to have been diagnosed as depressive states, and 138 to be suffering from schizophrenia. Also, out of this number, 202 cases were regularly in touch with a mental health worker, 138 of these being visited on a monthly basis and the rest more frequently than this. The remaining 287 were visited for short periods, 130 for less than one month, 124 sporadically over the year, and 33 for an intensive period of up to 2 months only. A rough assessment was also made of the type of cases handled and contact made by each worker.

Note has already been made of the improvement in liaison with St. James's Hospital. There have been similar developments in co-operation with Menston Hospital and Scalebor Park. In the last two months of the year, mental health workers were invited to case conferences held at the two hospitals monthly. These conferences are attended also by mental welfare officers of the West Riding and the psychiatric social workers and a few of the doctors and nursing staff of the hospitals. These meetings, together with close co-operation over discharge of cases to Rutland Lodge Hostel and into

the community, help to increase the patients' confidence in the mental health service.

The therapeutic social club continues to meet on Monday and Thursday evenings in the Hanover Square Handicapped Persons Centre. Attendance at meetings was lower than usual towards the end of the year, but was better during the summer when special meetings were arranged, e.g. hikes, a coach trip, visit to the theatre, etc. A visit was paid to the Bradford mental health club and members of that club were also entertained in Leeds. Members have been considering inviting patients from the Menston Friendship Club following a lead given by Bradford.

Within the department regular case discussions have been held between members of staff, and outside monthly case discussions are arranged with a group of social workers from the Leeds Council of Social Service, Family Service Unit, and Jewish Board of Guardians.

The Section represents the service on the Committee for Children Neglected or Ill-Treated in Their Own Homes and on the Policy Committee of the Leeds Council of Social Service.

Rutland Lodge Hostel (*Mr. Round, Warden*).—At the end of 1961, 29 men were in residence, of whom 19 were in full employment. The hostel has now been in operation for nearly 18 months and since opening 53 men have been admitted (including re-admissions).

While the demand for places has been smaller than anticipated, there is no doubt that a hostel of this type situated in a busy industrial area is essential for the rehabilitation of patients who are well enough to leave hospital but require a certain amount of "propping up" in their first venture into the community.

In the absence of reliable criteria for the selection of patients for this type of care, a fairly high rate of failure in the early years must be expected. We are most grateful to the Officers of the Ministry of Labour and the National Assistance Board whose ready assistance and co-operation has done so much to make this venture a success.

Twenty-three patients were admitted during the year, and 24 discharged. Particulars are as follows :—

Numbers in the Hostel			Working	Not Working	Total
31.12.1960	..	..	7	6	13
31.12.1961	..	..	19	10	29

ADMISSIONS 1961

Own Home	Menston	Stanley Royd	Scalebor Park	St. James's	Storthes Hall	Total
5	12	1	3	1	1	23

DISCHARGES 1961 (TOTAL 24)

To	Working	Not Working	Total
Own Home	4	3	7
Lodgings	4	2	6
Returned to Hospital ..	—	9	9
Other	1	1	2

TRAINING AND EDUCATION

As in previous years, places were made available at the junior and senior training centres for students taking the National Association for Mental Health Course for teachers of the mentally handicapped. Diploma in Social Science students from Leeds University and a student of the Psychiatric Social Worker Course at the London School of Economics were attached to the Section for practical work. A similar visit over a fortnight was arranged for a student from the National College for the Training of Youth Leaders in Leicester.

The usual lectures and demonstrations were given to medical and social science students, student health visitors and home nurses. Talks were also given to the Women's Section of Toc H, the Society of Mental Welfare Officers, and the North-Eastern Branch of the Association of Psychiatric Social Workers.

Dr. Blythe of the Department of Genetics and her colleagues at the Department of Chemical Pathology, University of Leeds, have continued their investigations into the biochemical abnormalities associated with mental subnormality and are now working with patients in the over 16 age group.

Two newly appointed Mental Welfare Officers attended a fortnight's introductory course in mental health work organised by the National Association for Mental Health at Harrogate and one Mental Welfare Officer attended the annual refresher course of the National Association for Mental Health at Leeds University. Training courses attended by staffs of training centres are referred to above.

The Committee has purchased a number of books on mental health topics which are available on loan to members of the Section for study. It is hoped that this small library will be added to and kept up-to-date and will serve as a useful stimulus in keeping abreast of recent developments.

Thanks are due to the Women's Voluntary Services and to St. George's Crypt for help with clothing ; to the Leeds District Aid in Sickness Fund and the Far Eastern Prisoners Aid Society for generous monetary grants to necessitous patients and their families ; to the Rosemary Fellowship for gifts of money and for parcels and coal at Christmas-time. We owe a special debt of gratitude to the Ministry of Labour for help received from the Disablement Resettlement Officers in placing suitable patients in employment. Co-operation with the Disablement Resettlement Officers has been particularly close since the opening of the mental health hostels. We thank the Leeds Regional Hospital Board for assistance with diagnostic problems and in finding beds for those who need admission to hospital. As always, we have worked closely with the School Health Service and have received much help from the Welfare Services Department and from the Housing Department in dealing with the many problems of our patients.

APPENDIX

TABLE I

CASES DEALT WITH BY MENTAL HEALTH OFFICERS

			Males	Females	Total
1.	Calls received		473	707	1,180
2.	Visits paid		601	1,077	1,678
3.	Informal admissions :—				
	St. James's Hospital		52	116	168
	Menston Hospital		81	78	159
	Stanley Royd		35	33	68
	Scalebor Park		16	48	64
	Other Hospitals		3	4	7
	Total informal admissions dealt with by Mental Welfare Officers		187	279	466
4.	Patients admitted under Compulsory Orders, Sections 25 and 29 :—				
	St. James's Hospital		61	104	165
	Menston Hospital		35	49	84
	Stanley Royd Hospital		17	19	36
	Scalebor Park Hospital		7	9	16
	Other Hospitals		4	3	7
	Total		124	184	308
5.	Patients admitted under Treatment Orders, Section 26 :—				
	Menston Hospital		19	44	63
	Stanley Royd Hospital		6	20	26
	Scalebor Park Hospital		3	1	4
	Other Hospitals .. ..		..	1	1
	Total		28	66	94

TABLE II

PARTICULARS OF SUBNORMAL AND SEVERELY SUBNORMAL PATIENTS
ASCERTAINED DURING 1961.

	Males	Females	Total
1. (a) Cases reported by Local Education Authority :—			
(i) Ineducable children ..	14	15	29
(ii) At 15 years—on leaving school	9	4	13
(b) Other cases reported during 1961 ..	28	22	50
Total number of cases reported during the year	51	41	92
2. Disposal of cases reported during the year :—			
(i) Placed under informal supervision ..	45	37	82
(ii) Placed under guardianship ..	1	..	1
(iii) Admitted to hospital	4	3	7
(iv) Died or removed	1	1	2
Totals	51	41	92

TABLE III

PARTICULARS OF SUBNORMALS ON 31ST DECEMBER, 1961

	Males	Females	Total
(a) Under Supervision	455	298	753
(b) Under Guardianship	6	1	7
(c) In Hospitals	467	423	890
Totals	928	722	1,650

TABLE IV
TRAINING CENTRES

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
Training Centres					
Stanningley	61	1	44	1	107
East Leeds	71	2	43	..	116
Armley Grange .. ..	..	..	7	45	52
North Leeds	13	103	..	..	116
	145	106	94	46	391*
Sheltered Workshops					
North Leeds .. ..	..	9	..	..	9
Pioneer Laundry .. ..	..	1	..	32	33
	..	10	..	32	42
Totals	145	116	94	78	433

* Includes 37 West Riding cases.

TABLE V
PSYCHIATRIC CARE AND AFTER-CARE

			Males	Females	Total
1. Hospital cases			69	204	273
2. After-care cases			215	521	836
3. Total cases dealt with			284	725	1,109
4. New cases referred			141	163	304
5. Hospital Interviews			108	320	428
After-care visits			1,278	2,306	3,584
After-care Office Interviews			259	545	804
Total visits and interviews			1,645	3,171	4,816
6. Social Reports			46	46	92
Other Reports			31	45	76
Total			77	91	168

Housing

HOUSING ACTS, 1936-1961*Repair, Individual Demolition, Clearance and Overcrowding*

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.

Chief Public Health Inspector

Statistical data in this section of the Report has been compiled by Mr. A. O. Wheatley, Supervisory Public Health Inspector of the Housing Division.

Number of Houses.—The total number of houses and flats in the city on 31st December, 1961, was 174,678 made up of 50,629 back-to-back houses and 124,049 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 2,974; of these, 1,545 were built by the Corporation and 1,429 were erected by other bodies and persons. During the year the Local Authority converted 38 houses into 91 flats and 42 houses were converted into 107 self-contained flats by private owners.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, 1961, was 18,132 of which 11,902 were regarded as adequately housed.

Overcrowding.—There is a further slight improvement in the degree of overcrowding, the percentage on Corporation Estates having fallen from 0.25 to 0.21. There are 45,963 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 0.21. 50 families who were living in overcrowded privately owned houses have been rehoused; all these families have been accommodated in municipal dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

The number of certificates of permitted numbers issued during the year was 45.

Housing Repairs and Rents Act, 1954, and Housing Act, 1957.—

No houses in Clearance Areas were considered to be of a sufficiently good standard for them to be retained as providing accommodation of a standard which is adequate for the time being.

HOUSING ACTS, 1936-1957, PART IV.—OVERCROWDING.

January 1st to December 31st, 1961.

	1961
Number of new cases of overcrowding discovered in houses owned by the Corporation	19
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	31
Number of overcrowding cases relieved during the year in course of slum clearance operations	37
A. No. of applications for Municipal dwellings known to be statutorily overcrowded	308
B. No. of Municipal Estate dwellings provided to relieve statutory overcrowding	50

Unfit Houses.—During the year 14,898 dwelling-houses were surveyed and examined and 5,642 nuisances and housing defects were remedied. Houses numbering 1,990 found to be defective in one respect or another under the Public Health Act were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1957, and found not to be in all respects reasonably fit for human habitation and capable of repair was 5,222.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 18 houses under the Public Health Act at a cost of £91 7s. 7d., this amount being recovered from the owners of the properties concerned.

Demolition of Individual Unfit Houses.—The number of Demolition Orders made was 11, whilst 5 Closing Orders were made on parts of buildings. In the case of 34 houses, the demolition of which was inexpedient because of structural considerations, Closing

Orders were made under the terms of Section 17, Proviso to Sub-Section 1 of the Housing Act, 1957.

The number of houses demolished was 33. During the year 52 families consisting of 114 persons affected by either Demolition or Closing Orders were rehoused by the City Council, while 15 families found their own accommodation; a further 4 houses were demolished by other Corporation Departments.

Clearance Areas.—During the year 35 areas comprising 1,858 houses were officially represented to the City Council. This is considerably less than the figure for 1960, namely 2,911, but it approaches the annual average figure for the previous five years which is in the region of 2,000. The number of occupants was 4,090. During the year 16 Public Inquiries were held in respect of 50 areas, comprising 2,692 houses. In addition, whilst no Public Inquiry was held in respect of the Dunkirk Hill Clearance Areas Nos. 1 and 2 Woodbine Square Clearance Area and Wyther Lane Clearance Area, an Inspector from the Ministry of Housing and Local Government visited and inspected these areas which comprised 59 houses.

No. of houses	Clearance Areas	Date of Inquiry
6	Scotland Mill Cottages, Nos. 1 and 2	10.1.61
68	Cross Stamford St. (Newtown) Nos. 1 and 2 ..	10.1.61
687	Kirkstall Road (West) No. 1 and 2	31.1.61
159	Balm Road (Hunslet) Nos. 1 to 4	21.3.61
32	Melbourne Street (North Street)	21.3.61
193	Hugh Street (Tong Road) Nos. 1 and 2	30.5.61
86	Radnor Street (Wellington Road)	30.5.61
81	Wortley Road Nos. 1 to 4	13.6.61
53	Bedford Place (Park Lane) Nos. 1 to 4	13.6.61
509	Burmantofts (Burns Street)	13.6.61
60	Woodhouse Cliff (Hyde Park) Nos. 1 to 4	22.8.61
120	Chapel Allerton (Town Street) Nos. 1 to 10	22.8.61
50	Oban Square (Armley) Nos. 1 and 2	19.9.61
75	Kendal Terrace (Kendal Lane)	19.9.61
507	Springfield Place (Little Woodhouse) Nos. 1 to 9	19.10.61
6	Hunslet Lane	15.11.61

The "confirmation" by the Ministry of Housing and Local Government has been received for 28 areas, the total number of houses affected being 1,613 as compared with 41 areas involving 3,234 in the previous year.

The average number of persons per house in all areas represented during the year was 2.73. The number of houses demolished in confirmed Clearance Areas during the year was 2,073.

During the year 23,122 enquiries about the position of houses in relation to the City Council's Slum Clearance Programme were answered.

The table below gives a summary of action under the Demolition, Closing and Clearance Sections of the Housing Act, 1957.

	1959	1960	1961
SECTION 17—HOUSING ACT, 1957:—			
No. of houses represented for demolition	62	59	7
No. of Demolition Orders made	130	52	11
No. of families concerned	69	47	10
No. of persons concerned	178	126	25
SECTION 17 (1)—HOUSING ACT, 1957:—			
No. of dwellings represented for closing	62	37	38
No. of Closing Orders made	67	44	34
No. of families concerned	73	52	34
No. of persons concerned	261	181	105
SECTION 18—HOUSING ACT, 1957 (Parts of Buildings):—			
No. of dwellings represented for closing	8	9	5
No. of Closing Orders made	7	9	5
No. of families concerned	10	9	5
No. of persons concerned	29	34	26
No. of undertakings accepted from owners ..	47	22	11
No. of houses demolished	1,448	1,269	2,106
No. of houses (Parts of Buildings) closed	7	9	4
No. of houses closed	67	44	29
No. of families re-housed by Corporation at 31.12.61 (S.S. 17, 17(1) and 18, H.A., 1957)	302	113	52
No. of families awaiting re-housing at 31.12.61 (S.S. 17, 17(1) and 18, H.A., 1957)	68	40	21
No. of families who found own accommodation at 31.12.61 (S.S. 17, 17(1) and 18 H.A., 1957) ..	44	21	15
No. of families re-housed at 31.12.61 (S.42, H.A., 1957)	1,293	2,168	1,549
No. of families who found own accommodation (S. 42, H.A., 1957)	190	188	197
No. of houses referred for opinion but not represented ..	197	201	183
No. of dwellings represented (S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas ..	55	67	35

The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the City during the year ended 31st December, 1961, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

		1959	1960	1961
Number of new houses erected during the year	3,559	4,179	2,974	
(i) By the Local Authority	2,035	2,966	1,545	
(ii) By other bodies and persons	1,524	1,213	1,429	
1. Inspection of dwelling-houses during the year.				
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	25,018	23,552	14,898	
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made	2,944	3,006	5,642	
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	2,413	3,290	3,041	
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	306	182	170	
2. Remedy of Defects during the year without Service of Formal Notices.				
Number of defective dwelling-houses rendered fit in consequence of informal action	2,433	2,551	1,877	
3. Action under Statutory Powers during the year.				
A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.				
(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. ..	..	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices:—				
(a) By owners .. ..	..	..	..
(b) By Local Authority in default of owners ..	..	..	..
B.—Proceedings under the Public Health Acts.				
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,364	1,084	1,046	
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—				
(a) By owners	1,438	1,503	1,481	
(b) By Local Authority in default of owners ..	15	26	18	
C.—Proceedings under Sections 17 and 18 of the Housing Act, 1957.				
(1) Number of dwelling-houses in respect of which				
(a) Demolition Orders were made	130	52	11	
(b) Closing Orders were made:—				
(i) S. 18, H.A., 1957	7	9	5	
(ii) S.17(1), H.A., 1957	67	44	34	
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	464	128	33	

Housing (Financial Provisions) Act, 1958-Section 3 (2) (a).—During the year 50 houses owned by the City Council were declared to be unfit for human habitation; the necessary certificate of unfitness was furnished in respect of them and 39 houses affected by such action under this Act were demolished.

Certificates of Disrepair.—Details of the numbers of applications for Certificates of Disrepair and applications for cancellations of Certificates of Disrepair which have been dealt with since the Rent Act, 1957, came into force on 6th July, 1957, until 31st December, 1961, are given in the following table:—

RENT ACT, 1957. First Schedule

APPLICATIONS FOR CERTIFICATES OF DISREPAIR				
(1) No. of applications for certificates .. .. ..	..	..	..	1,316
(2) No. of decisions not to issue certificates .. .. ..	..	..	..	31
(3) No. of decisions to issue certificates:—				
(a) in respect of some but not all defects .. .. ..	..	..	..	1,017
(b) in respect of all defects .. .. ..	..	..	..	241
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule .. .. ..	..	..	..	978
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule .. .. ..	..	..	..	4
(6) No. of certificates issued .. .. ..	..	..	..	246
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR				
(7) Applications by landlords to Local Authority for cancellation of certificates .. .. ..	..	..	..	173
(8) Objections by tenants to cancellation of certificates .. .. ..	..	..	..	73
(9) Decisions by Local Authority to cancel in spite of tenant's objections .. .. ..	..	..	..	32
(10) Certificates cancelled by Local Authority .. .. ..	..	..	..	132

Improvement Grants.—The Housing Committee has continued to make grants under the Housing (Financial Provisions) Acts, 1958 and 1959, to enable the improvement of sub-standard houses to be carried out by installing modern amenities such as bathrooms, internal water closets, food stores, etc.

Improvement Grant Areas.—In addition to the policy of making grants to owners of individual houses, there are in the city certain declared "Improvement Grant Areas". These areas have been specially surveyed and judged particularly suitable for improvement

grant works. All the owners of houses in the areas had been informed of the facilities available for improving their properties. The offer extended to include willingness of the City Council to lend that part of the cost which would have to be borne by the owner, and also to declare the willingness of the Council to purchase the property and improve it if the owners preferred that course.

The aim has been to find whole areas of well constructed houses lacking modern amenities and by offers of help (and even if need be by use of compulsory powers) to ensure total improvement of the whole of such areas, thereby avoiding piecemeal improvement of some houses mingled with other deteriorating properties.

During 1961 no new improvement grant areas were surveyed but the consolidating work in existing areas was fully maintained in an effort to achieve the full response desired.

Standard Grants.—The House Purchase and Housing Act, 1958, introduced “ Standard Grants ” which are available to owners of dwelling houses “ as of right ” if their properties lack any of the five essential amenities, subject to the “ life ” of such a house being at least 15 years. It will be noted from the table below that to the end of this year only 182 houses had been improved by this procedure. One reason for this comparatively low figure is that the Authority is not only willing but anxious to carry out improvement grant work as thoroughly as possible and encourages applicants to use the “ discretionary ” grant procedure in preference to the standard grant procedure which is limited to the provisions of five basic amenities only, namely:—

- (a) a fixed bath or shower in a bathroom,
- (b) a wash hand basin,
- (c) a hot water supply,
- (d) a water closet in or contiguous to the dwelling, and
- (e) satisfactory facilities for the storing of food.

All of these five amenities are equally available by “ discretionary ” grant, and in addition, other improvements such as dormer

windows to convert skylighted attics to habitable bedrooms, improved heating appliances and cooking appliances, improved artificial lighting, etc. can be included to the benefit of all concerned. Therefore it is held to be in the general interest to encourage applicants to opt for "discretionary" grants and to obtain comprehensive improvement of their properties.

The position from the commencement of the scheme for both discretionary improvement grants and standard grants is as follows:—

IMPROVEMENT/STANDARD GRANTS

Number of houses in respect of which applications received—Improvement Grant/Standard Grant	5,399
Number of houses in respect of which applications withdrawn—Improvement Grant/Standard Grant	756
Number of houses not suitable for Improvement Grant	1,318
Number of houses not suitable for Standard Grant	51
Number of houses in respect of which formal applications for Improvement Grant have been received	1,949
Number of houses in respect of which formal applications for Standard Grant have been received	331
Number of formal applications for Improvement Grant approved by the Local Authority	1,791
Number of formal applications for Standard Grant approved by the Local Authority	288
Number of houses improved—Improvement Grants	1,369
Number of houses improved—Standard Grants	182

All applications are dealt with by the staff of the Public Health Department from reception to completion.

Conversion Areas.—The City Council has continued its interest in the conversion into flats and maisonettes of houses which are, by present-day standards, too large to be suitable for occupation by single families and which are the subject of a number of lettings

without the provision of adequate facilities. It is felt that such houses should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.

Generally, such houses tend to be grouped in certain neighbourhoods and it has been convenient therefore to deal with this policy on an "area" basis after full preliminary surveys.

Following the surveys, an initial approach was made to owners informing them that improvement grants and loans were available to meet the cost of conversion of houses into self-contained flats and maisonettes and that if they did not wish themselves to convert the houses that the City Council would be glad to acquire these houses (if a satisfactory price could be agreed) in order to ensure the proper conversion of the property.

Where owners were not willing either to improve their houses or to sell them to the Corporation to allow such improvements to take place, the City Council decided to deal with the balance of such houses by way of Compulsory Purchase Order. The Ministry held Public Inquiries during the year in connection with such Compulsory Purchase Orders as follows:—

Name of Area	No. of houses	Date
Studley Grange Area No. 2	.. 12	14.3.61
Blenheim Square ..	.. 17	14.3.61
Studley Grange Area No. 3	.. 25	19.6.61
Hanover Square ..	.. 5	20.6.61
102 Louis Street ..	.. 1	20.6.61

SUMMARY OF POST-WAR ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Skinner Lane Areas 1 and 2 Upper Carr Place Areas 1, 2, 3 and 4	19.9.49 17.7.51	C.P.O. C.P.O.	27 30	71 107	.. ..	29.5.51 26.11.52	27 30	27 30
Brown's Yard (North Street)	12.5.52	C.P.O.	32	131	..	1.2.54	32	32
Temperance Street (Kirkstall)	8.9.52	C.P.O.	21	62	..	19.5.51	21	21
Burton Street (Dewsbury Road)	20.10.52	C.O.	33	76	..	28.10.53	33	29
Benson Street (Sheepscar)	..	C.O.	7	13	..	1.8.53	7	7
Franchise Street Areas 1, 2, 3 and 4	19.1.53 15.12.52	C.P.O.	25	79	..	Areas 1, 2 and 4 :— 10.11.53	7 25	7 25
Low Moor Side (Holbeck) Areas 1 and 2	16.3.53 .. 16.3.53	C.P.O. C.P.O.	30 20	101 52	.. ..	18.1.54 3.2.54	30 20	30 20
Freethold Street Area	..	..	..	..	..	..	..	..
Monkton Street (Dewsbury Road) Area	..	..	..	..	..	..	..	..
Camp Street Area	..	..	..	..	..	..	..	..
Saville Green No. 1 Area	15.6.53	C.P.O.	30	83	14.1.54	8.3.54	30	30
Victoria Place (Camp Road) Area	15.6.53	C.P.O.	24	76	..	20.1.54	24	24
Carr Road (Camp Road) Areas 1, 2 and 3	13.7.53	C.P.O. C.P.O. C.P.O.	115 10 13.7.53	349 108 16	9.6.54 6.4.54 6.4.54	22.7.54 9.6.54 9.6.54	116 10 10	116 10 10
Sheepscar Street North Area	13.7.53	C.P.O.	16	65	6.4.54	14.5.54	16	16
Pottery Fields Area No. 1	21.9.53	C.P.O.	14	38	9.6.54	22.7.54	14	12
Oldfield Lane Areas 1 and 2	21.9.53	C.P.O.	23	89	..	28.6.54	23	23
Potternewton Lane Areas 1 and 2	16.11.53	C.P.O.	27	84	9.6.54	22.7.54	27	27
Area No. 1 ..	..	..	..	..	..	..	..	..
Area No. 2 ..	..	..	..	..	..	..	..	..
Woodhouse Cliff (Smith's Court) Areas 1 and 2	16.11.53 14.12.53	C.P.O. C.P.O.	8 6	22 7	9.6.54 ..	22.7.54 7.7.54	8 6	8 6
Area No. 1 ..	..	..	..	..	..	..	..	..
Area No. 2 ..	..	..	..	..	..	..	..	..

C.O.—Compulsory Purchase Order
C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Cobourg Street Areas 1 to 8:—									
Area No. 1 ..	14.12.53	C.O.	2	6	..	19.1.55	6.7.55	2	2
Areas Nos. 2, 3 and 4 ..	14.12.53	C.P.O.	36	123	..	19.1.55	6.7.55	35	35
Area No. 5 (part) ..	14.12.53	C.O.	4	..	..	19.1.55	6.7.55	4	4
Area No. 6 (part) ..	14.12.53	C.O.	5	..	..	19.1.55	6.7.55	5	5
Area No. 5 (part) ..	14.12.53	C.O.	5	..	..	19.1.55	6.7.55	5	5
Area No. 6 (part) ..	14.12.53	C.P.O.	2	..	..	19.1.55	6.7.55	2	2
Area No. 7 ..	..	..	11	3	..	..	..	..	..
Area No. 8 ..	..	..	3	..	..	..	..	..	..
Saville Green Areas 2 to 10 ..	18.1.54	C.P.O.	367	1,140	..	19.1.55	10.6.55	367	364
Potternewton Lane Area 3 ..	18.1.54	C.P.O.	3	3	..	19.10.54	24.1.55	3	3
Carlisle Street (Wellington Road) ..	15.2.54	C.P.O.	42	159	..	19.10.54	24.1.55	42	42
Charing Cross Street and Scott Street (Woodhouse) ..	15.2.54	C.P.O.	204	595	..	19.10.54	24.1.55	202	201
Pottery Fields Areas 2 to 7 ..	22.3.54	C.P.O.	154	489	..	26.10.54	25.2.55	154	154
New Inn Street (Tong Road) :—									
Area No. 1 ..	22.3.54	C.P.O.	5	8	..	..	24.3.55	5	1
Area No. 2 ..	22.3.54	C.P.O.	6	8	..	..	24.3.55	6	6
Area No. 3 ..	22.3.54	C.P.O.	43	116	..	1. 3.55	5.5.55	43	43
Area No. 4 ..	22.3.54	C.P.O.	69	186	..	..	24.3.55	69	68
Whitelock Street (North Street) :—									
Area No. 1 ..	22.3.54	C.P.O.	11	47	..	26.10.54	10.2.55	10	7
Area No. 2 (part) ..	22.3.54	C.P.O.	31	114	..	26.10.54	20.5.55	29	21
Area No. 2 (part) ..	22.3.54	C.O.	16	53	..	26.10.54	20.5.55	2	2
Area No. 3 ..	22.3.54	C.P.O.	2	8	..	26.10.54	16.2.55	16	16
Area No. 4 ..	22.3.54	C.O.	39	170	..	26.10.54	20.5.55	39	36
Area No. 4 (part) ..	22.3.54	C.P.O.	154	435	6.4.55	30.8.55	8.11.56	148	140
Upper Worley Road Areas 1 to 8 ..	21.4.54	C.P.O.	1	..	..	..	..	8.11.56	1
do.	Area 2 (part)	C.O.	6	..	..	..	..	8.11.56	1
do.	Area 4 ..	C.O.	7	..	..	..	..	8.11.56	7
do.	Area 8 (part)	C.O.	3	..	..	..	..	8.11.56	3
do.	Area 8 (part)	C.O.	3	..	..	..	..	8.11.56	3

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—*continued*

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Silver Royd Areas 1 and 2 Greenside Road (Lower Wortley) Areas 1 to 4	21.4.54	C.P.O.	44	111	..	1.3.55	16.2.55	44	40
Green Road (Burmantofts) Areas 1 to 5	21.5.54	C.P.O.	62	173	..	14.6.55	4.8.55	62	62
Town Street (Beeston) Areas 1 to 11	16.7.54	C.P.O.	645	1,805	6.4.55	6.10.55	4.2.56	642	642
Armley Road Areas 1 and 2	24.9.55	C.P.O.	184	413	6.4.55	25.10.55	20.2.56	185	185
Oatland Row (Meanwood Road) ..	19.10.54	C.P.O.	84	229	..	8.6.55	3.8.55	84	83
Church Street (Hunslet) Areas 1 to 15	19.11.54	C.P.O.	37	86	..	..	19.5.55	37	37
Cross Lane Farnley Areas 1 to 5	19.11.54	C.P.O.	162	440	27.7.55	22.11.55	..	..	143
Alfred Place (Camp Road) Areas 1 to 6	17.12.54	C.P.O.	146	374	4.1.56	17.4.56	19.7.56	144	143
Villiers Terrace (Camp Road) Areas 1 to 3	21.1.55	C.P.O.	21	92	..	8.6.55	4.8.55	21	21
Belinda Street (Hunslet) Areas 1 to 6	18.2.55	C.P.O.	67	491	27.7.55	23.11.55	16.3.56	65	65
Michael Street (Hunslet) ..	18.2.55	C.P.O.	126	391	6.6.56	25.9.56	31.1.57	124	122
Minor Street (Kirkstall Road) ..	18.2.55	C.P.O.	12	28	27.7.55	..	2.11.55	12	12
Langham Street (Wellington Road) (part) ..	25.3.55	C.P.O.	14	30	4.5.55	..	4.8.55	14	14
" " Street (Wellington Road) Areas 1 and 2	25.3.55	C.O.	297	913	C.P.O. 7.3.56 C.O. 3.10.56	19.6.56	8.11.56	287	285
Area No. 1 ..	25.3.55	C.P.O.	33	88	C.P.O. 7.3.56 C.O. 3.10.56	19.6.56	25.10.56	33	33
Area No. 2 ..	25.3.55	C.O.	10	20	..	19.6.56	25.10.56	10	10
Beckett Street (Burmantofts) Areas 1 and 2	25.3.55	C.P.O.	429	1,111	7.3.56	19.6.56	3.10.56	429	427
Meynell Street (Holbeck) Areas 1 to 5	20.5.55	C.P.O.	1,194	1,194	4.7.56	6.11.56	29.5.57	438	434
Northfield Villas (Northfield Terrace) ..	16.6.55	C.P.O.	4	26	7.12.55	..	9.3.56	4	4
Nevin Street (Hunslet Road) ..	14.7.55	C.P.O.	13	36	4.1.56	..	17.4.56	13	13
Ramsden Terrace (North Street) ..	14.7.55	C.P.O.	4	17	4.1.56	..	17.4.56	4	4

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—*continued*

Area	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses demolished
Buslingthorpe Lane (Meanwood)	14.7.55	C.P.O. & C.O. (Area 4)	179	471	C.P.O. 1.8.56 C.O. 3.4.57	12.12.56 C.O. 21.1.57	5. 7.57	179	153
Areas 1 to 7	..	C.P.O.	34	56	4.7.56	24.10.56	21. 1.57	33	24
West End Terrace (Hyde Park)	..	C.P.O.	..	..	..	..	..	..	..
Areas 1 to 4	14.9.55	C.P.O.	..	..	..	..	..	..	..
Burley Village (Burley Road)	..	C.P.O.	..	..	..	..	..	..	..
Areas 1 and 2	..	C.P.O.	..	..	..	..	..	..	..
Oatland Houses (Duxbury Street)	..	C.P.O.	..	..	..	..	..	..	..
Meanwood Street (Meanwood Road)	20.10.55	C.P.O.	3	15	3.10.56	19. 2.57	17. 5.57	56	43
Areas 1 to 4	..	C.P.O.	..	..	..	..	..	..	..
Bentley Cottages (Meanwood)	..	C.P.O.	..	..	..	..	..	..	..
Burton Row (Hunslet) Areas 1 and 2	17.11.55	C.P.O.	15	46	4.7.56	24.10.56	4. 1.57	15	15
Rutland Terrace Areas 1 to 4	17.11.55	C.P.O.	40	79	4.7.56	24.10.56	8. 3.57	40	23
Old Belle Isle Cottages (Middleton)	17.11.55	C.P.O.	55	173	7.3.56	19.6.56	24.10.56	52	53
Areas 1, 2 and 3	..	C.P.O.	24	60	1.8.56	..	..	24	24
Louis Street	..	C.P.O.	2	25	7.3.56	19.6.56	24.10.56	2	2
Newsam Square (Halton)	..	C.P.O.	27	64	5.12.56	..	31. 7.57	27	27
Sowden Row (Crossgates) Areas 1 and 2	..	C.P.O.	..	..	..	..	..	..	..
Mistress Lane (Armenley) Areas 1 and 2	15.12.55	C.P.O. & C.O.	21	101	C.P.O. 4.7.56 C.O. 6.2.57	24.10.56	31.12.56	10	10
Strawberry Road (Hall Lane)	15.12.55	C.P.O.	4	10	6.6.56	..	12. 3.57	..	34
Byron Street	..	C.P.O.	7	26	6.6.56	..	19.10.56	4	4
Argyle Road (Burmantofts)	..	C.P.O.	..	..	..	..	31.10.56	7	7
Areas 1, 2 and 3	..	C.P.O.	..	..	..	..	..	..	..
Club Row (Kirkstall)	16.3.57	C.P.O.	291	787	4.12.57	18.3.58	7.10.58	288	272
Kirkstall Road (East) Areas 1, 2, 3, 1, 5, 6, 7, 8, 9, 10, 11 and 12	15.6.57	C.P.O.	437	1,096	4.12.57	18.3.58	No. 12:— 22.4.58 Nos. 6 &	23	353
Stansfield Row Area	15.6.57	C.P.O.	60	839	4.12.57	..	7.—2.6.58 Nos. 1-5:— 28.11.58 2.4.58	19	..

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued.

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Albert Grove (Camp Road) Areas I, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17	17.10.57	C.P.O.	386	1,290	30.7.58	2.12.58	1.7.59	386	263
Lower Wortley Road Areas I	19.12.57	C.O.	14	35		2.12.58	13.7.59	14	
2	19.12.57	C.P.O.	24	63		2.12.58	18.4.59	24	
3	19.12.57	C.O.	7	15		2.12.58	13.7.59	7	
4	19.12.57	C.P.O.	5	12		2.12.58	17.7.59	5	
5 (part)	19.12.57	C.P.O.	147	374	Pt. C.P.O.	2.12.58	17.7.59	147	
5 (part)	19.12.57	C.O.	3	7		2.12.58	13.7.59	3	
6	19.12.57	C.P.O.	8	18		2.12.58	17.7.59	8	261
7	19.12.57	C.P.O.	2	4	Pt.	2.12.58	17.7.59	2	
8	19.12.57	C.O.	7	13	C.O.	2.12.58	17.7.59	7	
9	19.12.57	C.P.O.	3	7	30.7.58	2.12.58	17.7.59	3	
10	19.12.57	C.O.	3	7		2.12.58	17.7.59	3	
11	19.12.57	C.P.O.	24	53		2.12.58	17.7.59	3	
12	19.12.57	C.P.O.	26	73		2.12.58	17.7.59	24	
13	19.12.57	C.O.	4	7		2.12.58	17.7.59	24	
Theaker Lane (Armley) Areas I	15.11.57	C.P.O.	57	150	7.5.58	11.11.58	16.7.59	57	
2	15.11.57	C.P.O.	2	5	4.6.58	11.11.58	22.5.59	2	
3	15.11.57	C.P.O.	92	258	4.6.58	11.11.58	22.5.59	92	
4	15.11.57	C.P.O.	49	124	4.6.58	11.11.58	22.5.59	49	
5	15.11.57	C.P.O.	12	27	4.6.58	11.11.58	22.5.59	12	226
6	15.11.57	C.P.O.	2	8	7.5.58	11.11.58	16.7.59	2	
7	15.11.57	C.O.	3	7	7.5.58	11.11.58	13.7.59	3	
8	15.11.57	C.P.O.	35	78	4.6.58	11.11.58	22.5.59	35	
Little London (Camp Road) Areas I, 2, 3, 4, 5, 6 and 7	20.3.58	C.P.O.	438	1,491	1.10.58	10.2.59	13.10.59	438	379
Busingthorpe Lane (Sheepscar)	16.6.58	C.P.O.	342	990	7.1.59	7.7.59	23.2.60	334	145
Dolly Lane Areas I, 2, 3, and 4	15.9.58	C.P.O.	265	691	7.1.59	7.7.59	18.2.60	265	166

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—*continued*

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses demolished
Sayner Lane Areas 1	15.9.58	C.P.O.	326	888	7.7.59	6.1.60	25	..	..
2	15.9.58	C.P.O.	25	63	7.7.59	4.10.59	25	..	..
3	15.9.58	C.P.O.	61	147	7.7.59	7.8.59	61	6	249
4	15.9.58	C.P.O.	6	14	7.7.59	7.7.59	..	4	..
5	15.9.58	C.P.O.	4	14	7.7.59	..	..	8	..
6	15.9.58	C.P.O.	8	24	7.7.59	..	12	..	..
7	15.9.58	C.P.O.	12	40	7.7.59	4.2.60	..	..	..
Brancepeth Place Areas 1 and 2	15.9.58	C.P.O.	55	157	7.7.59	12.1.60	13.6.60	747	11
Moor Crescent Road Areas 1 and 2	18.12.58	C.P.O.	747	1,927	7.7.59	12.1.60	13.6.60	382	..
Moorville Street (Lady Fit Lane) Areas 1 and 2	..	..	..	..	..	..	..	..	..
Hyde Park Road "A" Areas 1, 2, 3, 4	19.2.59	C.P.O.	121	305	1.7.59	12.1.60	18.5.60	121	120
Balm Road (Hunslet) Areas 1, 2, 3, 4	16.3.59	C.P.O.	239	801	29.7.59	12.7.60	237	165	..
New Princess Street (Elland Road) Areas 1, 2, 3	16.4.59	C.P.O.	159	431	PT. 25.10.61	Visit 25.11.59	..	..	..
Clowes Street (Jack Lane) Area	16.4.59	C.P.O.	107	281	29.7.59	9.2.60	15.6.60	107	29
Dickinson's Yard, Armley, Area	16.4.59	C.O.	51	115	29.7.59	..	5.1.60	51	51
Benson Street (Sheepscar) Area No. 2	21.5.59	C.P.O.	3	15	6.5.59	..	29.2.60	3	3
Elland Street (Elland Road) Area	21.5.59	C.P.O.	74	188	29.7.59	9.2.60	15.6.60	..	56
Wortley Road Clearance Areas 1, 2, 3, 4, 5	21.5.59	C.P.O.	86	176	7.10.59	16.2.60	15.6.60	86	31
Wortley Road Areas 1, 2, 3, 4, 5	21.5.59	C.P.O.	81	166	1.2.61	13.6.61	5.2.62	..	..
Wellington Road Areas 1, 2, 3, 4, 5	18.6.59	C.P.O.	554	1,500	6.4.60	27.9.60	29.12.60	552	73
Red Lion Yard (Thwaite Gate) Areas 1, 2, 3, 4	16.7.59	C.P.O.	47	113	6.1.60	3.5.60	17.8.60	47	..
Pitfield Street (Hunslet) Areas 1 and 2	16.7.59	C.P.O.	137	377	6.1.60	3.5.60	16.9.60	135	..
Great Wilson Street Areas 1, 2, 3, 4	16.7.59	C.P.O.	33	105	6.1.60	3.5.60	14.9.60	33	21
Park Row (Kirkgate) Areas 1, 2, 3, 4	16.7.59	C.P.O.	165	373	7.6.61	16.1.62	..	..	..
Wyther Lane Area	16.7.59	C.P.O.	22	63	27.7.60	1.3.61	11.4.61	..	5
Beeston Royds Areas 1 and 2	16.7.59	C.P.O.	25	52	6.4.60	..	28.9.60	25	..
Leathley Road Areas 1 and 2	17.9.59	C.P.O.	24	64	$1 = 3.1.62$	16.1.62	..	..	..
					$2 = 17.6.61$				

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Johnston Street Area	17.9.59	C.P.O.	45	113	6.4.60	27.9.60	18.I.61	..	..
Upper North Street Area	..	C.P.O.	125	313	6.4.60	27.9.60	8.2.61	..	39
Scotland Mill Cottages Areas 1 and 2	17.9.59	C.P.O.	6	14	4.5.60	10.I.61	27.4.61	..	..
Hamover Street (Park Lane) Areas 1 and 2	..	..	..	..	..	..	..	..	..
Kendal Terrace (Kendal Lane) Area	17.9.59	C.P.O.	45	158	7.6.61	13.II.61	22.2.62	..	..
Bedford Place (Park Lane) Areas 1, 2, 3, 4	17.9.59	C.P.O.	75	197	3.5.61	19.9.61	13.II.61	..	..
Park Row (Kirkstall) Area No. 5	15.10.59	C.P.O.	53	135	1.2.61	13.6.61	13.II.61	..	..
Woodhouse Cliff Areas 1, 2, 3, 4	15.10.59	C.P.O.	5	12	7.6.61	16.I.62	..	..	..
Chapel Allerton (Town Street) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10	..	C.P.O.	60	159	1.3.61	22.8.61	13.II.61	..	..
Byron Street (North Street) Areas 2, 3, 4	15.10.59	Pt.C.P.O.	120	232	5.4.61	22.8.61	2.2.62	..	..
Belgrave Street (Wade Lane) Areas 1 and 2	15.10.59	C.P.O.	53	50	3.I.62	1.5.62	..	..	16
Cross Stamford Street (Newtown) Areas 1 and 2	15.10.59	C.P.O.	23	31	4.4.62	..	..	..	..
Melbourne Street (North Street) Area	15.10.59	C.P.O.	68	188	4.5.60	10.I.61	9.5.61	..	17
Kirkstall Road (West) Areas 1 and 2	19.II.59	C.O.	32	88	1.II.61	..	1.2.62	..	..
Beecroft Street (Kirkstall) Areas 1, 2, 3, 4 and 5	..	C.P.O.	689	1,932	3.II.60	31.I.61	1.I.61	..	16
Town Street (Bramley) Clearance Areas Nos. 1 to 34	18.2.60	C.P.O.	393	878	..	..	..	..	..
Hugh Street (Tong Road) Clearance Areas Nos. 1 and 2	17.3.60	C.P.O.	193	537	4.I.61	30.5.61	21.II.61	..	..
Radnor Street (Wellington Road) Clearance Area	17.3.60	C.P.O.	..	..	..	..	..	..	4
Burmantotts (Burns Street) C.A.	21.4.60	C.P.O.	86	211	1.2.61	30.5.61	11.9.61	..	..
Oban Square (Armill) Clearance Areas Nos. 1 and 2	..	C.P.O.	509	1,348	1.2.61	13.6.61	11.I.62	..	..
..	19.5.60	C.P.O.	50	90	3.5.61	19.9.61	12.II.61	..	..

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—*continued.*

Area	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Bedford Terrace (Sheepscar) Clearance Areas Nos. 1 and 2 ..	19.5.60	C.P.O.	60	165	..	..	..	..	..
Springfield Place (Little Woodhouse) C. Areas. Nos. 1 to 6 ..	14.7.60	C.P.O.	203	965	2.8.61	10.10.61	8.3.62	..	..
Rothsay Street (Elland Road) C. Areas Nos. 1 to 5 ..	15.9.60	C.P.O.	99	242	..	..	..	..	..
Springfield Place (Little Woodhouse) C. Areas Nos. 7 to 9 ..	15.9.60	C.P.O.	302	1,212	2.8.61	10.10.61	8.3.62	..	..
Leek Street (Hunslet) C. Areas Nos. 1, 2, and 3 ..	14.11.60	C.P.O.	394	1,048	4.4.62	..	..	..	..
Sackville Street (Sheepscar) C. Areas Nos. 1 to 4 ..	14.11.60	C.P.O.	294	758	..	..	..	..	..
Woodbine Square (Little Woodhouse Street) Clearance Area ..	14.11.60	C.P.O.	23	57	2.8.61	..	13.11.61	23	..
Grove Road (Hunslet) C.A. St. George's Terrace (Camp Road) C. Areas Nos. 1 to 4 ..	14.12.60	C.P.O.	264	790	..	..	..	..	..
Enfield Road (Roundhay Rd.) C. Areas Nos. 1 to 5 ..	19.1.61	C.P.O.	41	183	..	..	..	..	..
Dunkirk Hill (Canal Road) C. Areas Nos. 1 and 2 ..	16.2.61	C.P.O.	171	389	..	..	..	..	..
Hunslet Lane Clearance Area ..	16.2.61	C.P.O.	14	32	3.5.61	17.10.61	..	..	..
Robinson's Row (Seacroft) Clearance Area ..	..	..	6	13	3.5.61	15.11.61	..	..	..
Burmantofts (Shakespeare St.) Clearance Areas Nos. 1 to 3 ..	16.3.61	C.P.O.	5	10	3.1.62	1.5.62	..	..	..
	16.3.61	C.P.O.	534	1,486	..	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT 1936—*continued*

AREA	Date of Representation	Type of Order	No. of Houses	Popula-tion	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demol-ished
Holdforth Street (Wellington Road) C. Areas Nos. 1 to 7 ..	18.5.61	C.P.O.	774	2,270	..	..	..	..	..
Millshaw (Beeston) Clearance Areas Nos. 1 to 5 ..	15.6.61	C.P.O.	52	108	..	..	..	..	..
Bera Street (Hunslet) C. Area ..	15.6.61	C.P.O.	92	240	..	..	..	..	..
Goodwin Road (Tong Road) Clearance Areas Nos. 1 to 3 ..	20.6.61	C.P.O.	79	219	..	..	..	..	..
Albury Terrace (Hunslet) Clearance Area ..	20.6.61	C.P.O.	95	261	..	..	..	..	..
West End Terrace (Hyde Park)C. Areas Nos. 5 to 8 ..	15.9.61	C.P.O.	19	38	..	..	..	..	..
Whingate C. Areas Nos. 1 and 2 ..	15.9.61	C.P.O.	17	24	..	..	..	..	..

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

Food Hygiene

FOOD INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.

Chief Public Health Inspector

During 1961, 5,082 visits were paid by public health inspectors to premises in which foodstuffs intended for human consumption were prepared, stored or sold. 1,184 of these were to premises registered with the Local Authority under the provisions of Section 16 of the Food and Drugs Act, 1955, i.e. to premises used for the sale or manufacture or storage of ice-cream or the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale.

3,898 other visits were to places not registered under the Food and Drugs Act, 1955, i.e. places such as bakehouses, restaurants, cafes, canteens, butchers' shops, provision merchants etc.

A considerable amount of work was done under the Food Hygiene (General) Regulations, 1960, in respect of food premises. 137 warning letters were issued pointing out contraventions of the Regulations or to require alterations to premises to bring them into line with modern standards. These letters and other action taken by public health inspectors have resulted in a large number of improvements to food premises of all types. Details of this work are contained in the table of work done by public health inspectors printed on page 223.

Restaurants and Cafes.—786 visits have been paid to cafes and restaurants during the year and it was found that the general standard of hygiene has been maintained at a reasonably satisfactory level.

Offences not thought to warrant the institution of legal proceedings have been dealt with by immediate contact with the proprietors of the premises concerned.

The public health inspectors who visit factories and workplaces inspect also, as a matter of routine, the canteens and messrooms provided in these places. These again must conform to the provisions of the Food Hygiene Regulations if food is prepared for sale.

Under the provisions of the Food Hygiene (General) Regulations, 1960, 46 deficiencies were dealt with which related to the following:—

Lack of constant supply of hot and cold water or of hot water at a suitable controlled temperature to sinks or wash-hand basins	3
Lack of washing facilities for persons handling food ..	3
Lack of first-aid equipment	5
Inadequate provision of storage of out-door clothing of persons engaged in the handling of food ..	4
Unsuitable and insufficient facilities for washing food and equipment—sinks, etc.	2
Insufficient means of ventilation of foodrooms ..	8
Defective or unsatisfactory walls, floors, ceilings, etc., of foodrooms	5
Dirty conditions of floors, walls, ceilings, etc., of foodrooms	7
Other defects found	9

Conditions in industrial canteens have continued to improve. Certain structural alterations have been made and new equipment has been provided; the standard of hygiene continues to be comparable with those in commercial kitchens where food is prepared for sale to the general public.

Ice-cream Premises.—During the year 549 visits were made to the premises in the city which are used for the manufacture and sale of ice-cream.

Fish-Frying Premises.—The number of visits paid to registered fish-frying premises was 453. Six applications for registration were approved during the year, subject in one case to the carrying out of works of alteration to the premises.

Other Registered Food-Preparing Premises.—During the year 182 visits were made to other registered food-preparing premises such as those used for the manufacture of sausage or preparation of pork products, meat pies, jams, pickles and sauces. Ten applications for registration of premises used for one or other of those purposes were granted, subject in four cases to the carrying out of works of alteration to the premises.

Statistics with regard to the registration of premises under Section 16 of the Food and Drugs Act, 1955, are set out in the following table:—

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1961	..	..	..	..	..
Number of premises registered for storage of ice-cream during 1961	..	..	..	..	1
Number of premises registered for the sale of ice-cream during 1961	..	..	..	..	47
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (6 fried fish shops, 10 manufacturers of sausages, potted meat, meat pies, etc.)	..	..	..	..	16
Number of notifications of change of occupier received:— ice-cream premises	..	..	..	..	52
food-preparing premises	..	..	..	..	28
Number of premises removed from register:— Ice-cream premises (manufacture)	..	..	..	..	..
Ice-cream premises (storage)	..	..	..	..	..
Ice-cream premises (sale)	..	..	..	..	21
Food preparing premises	..	..	..	..	13
Number of premises on the register 31st December, 1961:— (a) used for manufacture of ice-cream	..	..	..	..	42
(b) used for the sale of ice-cream	..	..	..	..	1,828
(c) used for the storage of ice-cream intended for sale	..	..	..	..	10
(d) used for the manufacture of sausages, or preparation of preserved food	..	..	..	..	781

Legal Proceedings.—*Food Hygiene (General) Regulations, 1960.*—

(a) A street trader was prosecuted for smoking whilst serving open food—namely sausages, bread rolls and hamburgers—the food being sold from open trays on a street vending barrow. The defendant, who entered a plea of guilty, was fined £10. He stated his intention of abandoning this type of trading.

(b) A butcher was prosecuted for smoking whilst handling meat in his shop—case dismissed by the Stipendiary Magistrate.

(c) A butcher was prosecuted for smoking whilst handling meat in his shop—a fine of £10 was imposed.

(d) The occupier of a grocer's shop was fined £5 for smoking in a food room in which there was open food.

(e) The occupier of a grocer's shop was prosecuted in respect of the dirty condition of the premises. A fine of £75 was imposed.

Food Sampling.—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 273 formal and 472 informal samples of food and 4 formal and 32 informal samples of drugs during the course of the year for the purpose of chemical analysis. Legal proceedings were instituted in one case in accordance with details set out on page 184. Offences other than those subject to legal action were taken up with the manufacturers or other persons concerned.

The sample which was the subject of legal proceedings was one of "Boned Chicken in Jelly". The label on the tin in which this article was contained was misleading in several respects. Seen from a few feet away the only words that could be read were "Devon Farm Boned Chicken", although close examination revealed the words "In Chicken Jelly" and "Produce of Holland" in very small print. The pictorial part of the label illustrated a country scene with a number of cottages. The meat content was found to be satisfactory for an article described as "Boned Chicken in Chicken Jelly", but it was very much below the standard expected for an article described simply as "Boned Chicken". Legal proceedings were instituted for offences against the Merchandise Marks Act and the Food and Drugs Act. The defendant Company were fined a total of £50.

Several of the samples reported as unsatisfactory were canned fruit, some being canned strawberries. On examination some were found to contain less than the normal weight of fruit and were canned in "Light Syrup" and not in a "Heavy Syrup" as described on the label. Another brand was satisfactory as regards fruit and syrup content, but the presence of artificial colouring matter had not been declared. In all these cases the product had been imported, and representations were made to the importers. The companies concerned immediately admitted their mistakes and revised labels were submitted.

In the early part of the year a formal sample of "Creamed Rice Milk Pudding" was submitted to analysis. The Public Analyst reported that it was not of the quality demanded in that it contained not less than 18 per cent. added water. Investigations were made and it was found that the rice pudding was made from reconstituted full cream dried milk. A formula was given to the inspector, but the figures would not produce a milk of the minimum standard. Having regard to all the facts it was decided to institute proceedings. The case was withdrawn on an undertaking given in Court that the product would in future contain not more than seven per cent. added water. The defendant Company were allowed two months to dispose of existing stocks.

One of the drugs sampled which was found to be unsatisfactory was sold as "Slimming Bath Salts". It was found to consist of a mixture of sodium bicarbonate and washing soda. The total contents of the tin were worth about fivepence although it was being retailed at four shillings and threepence. The label and the enclosed literature made extravagant claims regarding the slimming properties of the bath salts. After discussions with the manufacturers, newly designed labels were submitted and considered to be satisfactory. The manufacturers also agreed to remove all literature and references, direct and indirect, to slimming properties.

Ice-Cream Sampling.—During the year 50 samples of ice-cream were taken for bacteriological examination, the samples being taken from the places of manufacture and from local vendors. Of this number 3 were classified as unsatisfactory and 9 very unsatisfactory. The results were, in each case, notified to the vendors and manufacturers. Where unsatisfactory results were indicated visits were paid to the production premises for the purpose of advising the manufacturers on improved methods.

Details of the bacteriological results are as follows :—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	33	66.0	Good
2	5	10.0	Satisfactory
3	3	6.0	Unsatisfactory
4	9	18.0	Very unsatisfactory

Bacteriological Examination of Food.—Routine bacteriological examination of food has been carried out during the year on a variety of commodities; 52 samples were submitted to the Public Health Laboratory Service for this purpose during the year. Details of the articles thus submitted are appended.

Article of food	No. of Samples Submitted				
Roast beef 1					
Peas 1					
Sausage roll 1					
Pork sausage 3					
Beef sausage 4					
Meat pies 2					
Pork pie 3					
Gelatine 1					
Spray-dried hen egg yolk 1					
Sausage meat 1					
Roast chicken 1					
Cream cake 1					
Boiled ham 1					
Ice-cream 3					
Polony 1					
Meat paste 1					
Steak and vegetables 1					
Iced lollipop 3					
Salami 2					
Ice-cream and lollipop Mixture 3					
Sugar syrup and fruit compound 1					

Continued on next page

Orange flavouring	..	..	..	I
Raspberry flavouring	..	..	..	I
Roast pork	..	..	..	I
Shell eggs. (South African)	..	..	..	I
Desiccated coconut	..	..	..	10
Coconut macaroons	..	..	..	I
Coconut tart	..	..	..	I

Extraneous Matter in Food.—A wide variety of complaints regarding foreign matter in food was submitted during the year in accordance with the following table:—

Dirt in milk bottle
Steel wool in cut white loaf
Wire in fish and chips
Insect in custard pie
String in sausage roll
Grease in loaf
Insect in fancy cake
Insect in buttered roll
Steel nut in cut white loaf
Piece of screw stopper in bottle of Stout
Dirt and string in bun
Linen bandage in french bun
Glass in ice-cream
Glass in jar of jam
Maggots in shelled almonds
*Cigarette filter-tip in sausage
Insect in sliced white loaf
Nail in teacake
Stone in tinned mushrooms
Wire in Eccles cake
Fly in Baby Food
Wire pin in currants
Sacking and string in loaf
Maggots in blanched almonds
Insect in Swiss-Roll
Dirt in lemon tart
*Piece of Glass in French Bread

Continued on next page

- *Dark Material in "Zerma-Rye Bread"
- *Glass fragment in pineapple drink
- *Synthetic fibres in teacake
- *Beetle in blackberry and apple pie
- Piece of paper in pork pie
- Wire in biscuit

Appropriate action was taken in respect of each of the above complaints, legal proceedings being instituted in six cases (indicated by an asterisk).

Legal Proceedings.—The following table sets out details of prosecutions taken during the year in connection with samples of food found to contain extraneous matter.

Article	Extraneous Matter	Result of Hearing
Sausage	Contained filter-tip from cigarette	Fined £10. Manufacturer.
Pineapple Drink ..	Contained glass fragment	Fined £25 with 8/6d costs. Manufacturer.
Tea-cake	Contained synthetic fibres	Fined £25. Baker.
Blackberry and Apple Pie ..	Contained Beetle	Fined £10. Baker.
French Bread ..	Contained glass	Fined £10 with £1 9s. 6d. Costs. Baker.
" Zerma Rye Bread "	Contained dark material	Fined £10. Baker.
Steak and Kidney Pie ..	Contained mould and in sour condition	Fined £10. Retailer.

Fertiliser and Feeding Stuffs Act, 1926.—During the year 8 formal and 4 informal samples of fertilisers were taken under the Fertilisers and Feeding Stuffs Act, together with 1 formal and 1 informal sample of Feeding Stuffs. All these samples were found to be satisfactory with the exception of one fertiliser, namely a sample of Dried Blood which was 0.7 per cent. deficient in Nitrogen on the stated amount, the limit of variation being 0.5 per cent. The matter was taken up with the manufacturer concerned.

Rag Flock and Other Filling Materials Act, 1951.—During the year the licences of three premises used for the manufacture of rag flock and one for the storage of rag flock were renewed. The total number of registered premises in the city remains at 55. Four samples, consisting of rag flock, fleece wool, cotton felt and white hair were taken during 1961. Each of these samples proved to be satisfactory, the manufacturers being notified accordingly.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purposes of the above Act extends from May 1st to April 30th. The work done during the year ended 30th April, 1962, is set out in the following table:—

Persons on the List on 30th April, 1961	337
Persons added to the List during the year	17
Persons removed from the List during the year	52
Persons on the List on 30th April, 1962	302
Premises on the List on 30th April, 1961	442
Premises added to the List during the year	18
Premises removed from the List during the year	54
Premises on the List on 30th April, 1962	406
Visits paid to:—	
1. Listed premises in connection with new applications	1
2. Listed premises in connection with unpaid fees .. .. ..	..
3. Listed premises for routine inspection .. .. ..	..
4. Unlisted premises	34
Contraventions:—	
Persons found to be selling Part II Poisons on Unlisted premises .. .. .. .. ..	..
Listed Sellers found with incorrectly labelled Part II Poisons in stock .. .. .. .. ..	..
Contraventions dealt with:—	
Persons ceasing to sell Part II Poisons from Unlisted Premises .. .. ..	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for Listing .. .. .. ..	..
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling .. .. ..	..

Legal Proceedings.—It was not found necessary to institute legal proceedings under the Pharmacy and Poisons Act during the year.

Pharmacy and Medicines Act, 1941.—No contraventions of this Act came to the notice of the Department during the year.

SAMPLING OF MILK

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.

Chief Public Health Inspector

Supervisory Inspector H. Long reports that the sampling officers in the Food and Dairies Section have taken, in all, 3,355 samples of milk for examination. This figure is made up of 2,634 chemical samples, 620 bacteriological samples and 101 biological samples. The chemical samples included 55 Channel Island milks.

The quantity and composition of the milk supplied to the city remains fairly constant, although the most pleasing feature was the reduction in the number of samples found to be unsatisfactory. There still remains, however, an unnecessarily high percentage of milks which had less than 8.5 per cent. solids-not-fat.

The average composition of milk brought into the city shows a total solids content of 12.39 per cent., made up of 3.72 per cent. fat and 8.67 per cent. solids-not-fat. Out of the 2,634 samples submitted for chemical analysis there were, however, 335 samples or 12.72 per cent. which showed solids-not-fat of less than 8.5 per cent. Although the freezing point, in the majority of cases, showed the deficiency to be due to natural causes, it does indicate the fairly high proportion of cows giving a poor quality milk. Perhaps these figures are not so surprising when it is remembered that the compositional scheme operated by the Milk Marketing Board has been based on the total fat content and has ignored the equally vital solids-not-fat content. To find milk which cannot reach the low standard of 8.5 per cent. is not to the credit of the dairy industry. Food and Drugs Authorities may have to consider their possible course of action if this trend continues.

Adulterated Milk.—Of the samples chemically analysed, 56 were reported as being unsatisfactory; 45 of them contained added water, 4 showed fat deficiency, 6 contained blood and one a trace of disinfectant. Legal proceedings were taken against three farmers for added water in milk and resulted in fines of £25 in two cases, and an absolute discharge in the third. A further prosecution was taken for the sale of hot milk containing added water; the proprietor of the milk bar was fined £20.

Radioactivity in Milk.—In September the number of samples submitted for radioactivity tests was considerably increased, following the resumption of nuclear tests. The Iodine-131 in the local milk supply was determined during the period when the level was causing anxiety in some quarters. Although the measurements showed a substantial rise, none of the levels reached gave any real cause for alarm. By late December the Iodine-131 content of milk had fallen to an insignificant level and the tests were discontinued.

Distribution and Sale.—In my last year's report I drew attention to the investigations which had taken place regarding noise nuisances which had occurred through the unsatisfactory distribution of bulk supplies. I then stated that efforts were being made to alleviate the nuisance by the erection of suitably sited milk depots. These have now been provided and the dairies concerned have been most helpful in overcoming the problems created.

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors:—

To dairies	512
To pasteurising and sterilising plants	19
To bottled milk shops	25
Other visits of enquiry	550
No access visits	26
Attendance at Court	24
Visits in connection with adulterated samples ..	66

During the year, 620 samples of milk were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies, schools and retailers in the streets. They were taken from the following designated milk:—

“ Pasteurised ”	175
“ Tuberculin Tested ” (Pasteurised)	183
“ Sterilised ”	94
“ Tuberculin Tested ” (Farm Bottled)	168

Bacteriological Examination of Milk.—Of the 620 samples submitted to the City Analyst for bacteriological examination, 4 failed to pass the methylene blue test.

METHYLENE BLUE (REDUCTION) TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
*Pasteurised { Dairies ..	94	94	100.0	..	..
Schools ..	81	81	100.0	..	..
*Tuberculin Tested (Pasteurised)					
Dairies	183	183	100.0	..	..
†Tuberculin Tested (Farm bottled) Dairies ..	168	164	97.6	4	2.4

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

†Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October,
or 5½ hours, November to April.

PHOSPHATASE TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
Pasteurised { Dairies ..	94	94	100.0	..	..
Schools ..	81	81	100.0	..	..
Tuberculin Tested (Pasteurised) Dairies ..	183	183	100.0	..	..

Satisfactory samples not to give colour reading of more than 2.3 Lovibond Blue Units.

TURBIDITY TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
Sterilised	94	94	100.0	..	..

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city:—

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distributors of milk
No. on the register on 31st December, 1960	27	31
No. added to the register during the year .. ..	..	..
No. removed from the register during the year	4	4
No. on the register on 31st December, 1961	23	27

DISTRIBUTORS OF BOTTLED MILK ONLY

No. of distributors of milk on the register on 31st December, 1960	869
No. added to the register during the year	149
No. removed from the register during the year	186
No. of distributors of milk on the register on 31st December, 1961	832
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1961	1,091

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1960

Description	Number in force on 31st December		
	1959	1960	1961
To use the designation "Tuberculin Tested"— 1. To sell by retail	160	150	153
To use the designation "Pasteurised"— 1. Pasteurisers' Licences	4	3	3
2. To sell by retail	173	159	161
To use the designation "Sterilised"— 1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,091	1,073	1,031

Biological Examination of Milk.—During the year 101 samples of milk were submitted to the Public Health Laboratory Service at Leeds for biological examination for the presence of tubercle bacilli. The results are shown in the following table.

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percent- age	No.	Percent- age
Tuberculin Tested ..	91	..	..	91	100.0
Pasteurised ..	..	..	..	..	..
Tuberculin Tested (Pasteurised) ..	..	..	..	..	..
Ungraded ..	..	10	..	10	100.0
Total ..	101	..	..	101	100.0

The Milk and Dairies (General) Regulations, 1959—Regulation 20.—It was not found necessary to serve any notices under this Regulation during the year.

Brucella Abortus.—During the year a report was received from a neighbouring local authority that a sample of milk originating from a wholesale dairy in the city had proved "positive" for the organism *Brucella abortus*, the agent giving rise to Brucellosis in the bovine and Undulant Fever in the human being. Samples of this Leeds milk were then taken by the public health inspectors and submitted to the Public Health Laboratory Service for bacteriological examination. These proved to be negative and the neighbouring authority was advised accordingly.

Arrangements were also made for the sampling of a source of supply at the request of a Leeds medical practitioner. This supply also proved to be free from brucellosis organisms.

Legal Proceedings.—The following table sets out details of prosecutions taken during the year in connection with samples of food found to be unsatisfactory by reason of adulteration or deficiency.

SUMMONSES ISSUED DURING 1961 UNDER THE FOOD AND
DRUGS ACT, 1955

No. of sample	Article	Adulteration or deficiency	Result of Hearing
89/J	Hot milk	10·6% added water	Fined £20 and ordered to pay 30/- costs. Retailer.
131/R 133/R 134/R 141/R	Milk	3·8%, 4·1%, 3·9% and 4·0% added water	Fined £25 and ordered to pay £6 costs. Producer.
921/R 922/R 926/R 927/R	Milk	2·5%, 3·0%, 5·3% and 5·3% added water	Fined £25 and ordered to pay £6 costs. Producer.
1063/R 1071/R 1072/R 1076/R	Milk	4·3%, 4·3%, 3·1% and 3·7% added water	Granted an Absolute Discharge on payment of £6 16s. costs. Producer.
1178/J	" Devon Farm Boned Chicken "	1. Absence of name and address of packer or labeller or Registered Trade Mark. 2. Misleading description as to country of origin.	Fined £25 on each count and ordered to pay £3 5s. costs. Importer.

MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Chief Public Health Inspector

Statistical data in this section of the Report has been compiled from reports submitted by Mr. J. S. Sewell, Supervisory Public Health Inspector for Meat and Other Foods.

Animals Slaughtered.—During the year 310,093 animals were slaughtered for human consumption at the Public Abattoir and the private slaughterhouses in the city, an increase of 32,488 on the figure for 1960. The following table gives an analysis of the animals slaughtered for human consumption at the Public Abattoir and the private slaughterhouses:—

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE
 SLAUGHTERHOUSES.

	Year	Cattle ex.Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	1960	25,349	9,281	22,748	141,295	22,199	220,872
	1961	28,664	9,149	23,309	165,435	24,936	251,493
Danube Road ..	1960	3,917	..	..	9,855	10,300	24,072
	1961	3,663	..	..	10,700	9,196	23,559
16 Gelderd Road ..	1960	932	15	237	4,261	19,642	25,087
	1961	1,370	..	1,062	6,776	17,995	27,203
Marshall Street, Cross Gates ..	1960	191	..	5	1,073	1,334	2,603
	1961	221	..	2	1,154	1,387	2,764
Cross Lane, Wortley ..	1960	234	95	..	1,204	..	1,533
	1961	321	34	..	1,269	..	1,624
Harrison's Yard Bramley ..	1960	..	..	..	..	3,438	3,438
	1961	..	..	..	..	3,450	3,450

Private Slaughterhouses.—The licences of five private slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society Ltd., Danube Road, Leeds; Messrs. T. Adamson and Sons, 16 Gelderd Road, Leeds; Mrs. S. U. Wilson and H. Lunn (trading as Wilson's), Marshall Street, Cross Gates, Leeds; Messrs. C. H. and J. W. Ellison, Cross Lane, Wortley, Leeds, and Mr. E. Taylor, Harrison's Yard, Bramley, Leeds.

These five private slaughterhouses have been conducted satisfactorily throughout the year. With the exception of lighting, all but one of these slaughterhouses have been brought into conformity with the standards specified by the Slaughterhouse Construction Regulations and work is being put in hand to rectify this deficiency. The remaining slaughterhouse is due for eventual demolition under the redevelopment plans for the area concerned.

Licensing of Premises for the Confinement of Animals awaiting Slaughter.—In accordance with the provisions of Section 63(2) of the Food and Drugs Act, 1955, applications were received for the grant and renewal of licences of premises used for the confinement of animals awaiting slaughter at a slaughterhouse, namely Leeds Industrial Co-operative Society Ltd., (lairages in Gelderd Road) and premises in York Road, being fields in the occupation of Messrs. Wilson. The licences were granted in each case.

Knacker's Yard.—There is only one knacker's yard in the city. This is in the occupation of Mr. J. R. C. Wilkinson, the situation being 133, Carr Moor Side, Hunslet. The premises have been well maintained and conducted satisfactorily during the year. Accordingly, upon application from the occupier, the licence permitting the use of these premises for the slaughter of animals not intended for human consumption was renewed. The return required to be rendered under the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958, showed the number of horses dealt with to be as follows:—

	1960	1961
Horses slaughtered at the knacker's yard	8	7
Horses slaughtered at collieries ..	..	47
Horses slaughtered at farms and customers' own premises .. ..	..	11
Horse carcases received .. ..	..	34
		30

Slaughter of Animals Act, 1958.—During the year 7 new licences to slaughter or stun animals were granted by the City Council and 136 were renewed.

Whole and Part Carcasses Condemned.—The following table shows the different species of animal and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases.

CARCASES INSPECTED AND CONDEMNED.

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs
NUMBER KILLED	34,239	9,183	24,373	185,334	56,964
NUMBER INSPECTED	34,239	9,183	24,373	185,334	56,964
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS					
Whole carcasses condemned ..	18	67	231	384	98
Carcasses of which some part or organ was condemned ..	2,411	595	21	8,824	3,155
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticerci	7.09	7.20	1.03	4.97	5.71
TUBERCULOSIS ONLY					
Whole carcasses condemned ..	3	..	..	..	1
Carcasses of which some part or organ was condemned ..	145	16	..	..	202
Percentage of numbers inspected affected with tuberculosis ..	0.43	0.17	..	..	0.36
CYSTICERCOSIS					
Carcasses of which some part or organ was condemned ..	39	1	..	..	..
Carcasses submitted to treatment by refrigeration	1	..	..	..	..
Generalised and totally condemned	1	..	..	..	..

Tuberculosis.—The incidence of tuberculosis in cattle continues to show a decline. Cases of bovine tuberculosis discovered at the city slaughterhouses are reported to the Ministry of Agriculture, Fisheries and Food for the purpose of veterinary investigation at the premises of origin.

Cysticercus Bovis and Ovis.—Inspection continued in the approved manner during the year in connection with the discovery of these conditions. 39 bullocks and one cow were found to be infested with the parasites. One beast carcase was submitted to treatment by refrigeration. One generalised case of cysticercus bovis was also discovered; the carcase was condemned as unfit for human consumption.

The Slaughterhouse (Meat Inspection Grant) Regulations, 1958.—The number of animals slaughtered in Leeds is in excess of the requirements of the city's population. This fact is indicated in the following table, which sets out the statistics upon which an application for a meat inspection grant was based:—

	1958-59	1959-60	1960-61	1961-62
Total units inspected	.. 906,895	909,150	966,322	1,070,741
*Datum figure ..	767,400	769,950	772,140	767,475
Export figure ..	139,495	139,200	194,182	303,266

*Datum figure based upon population $\times 1.5$ caput figure.

Disposal of Condemned Food.—The wholesale butchers disposed of their own condemned carcases, this material being consigned to the firm of Messrs. C. and B. Animal By-Products Ltd., of Wakefield. This firm uses the condemned carcase meat as raw material in their plant, in which it is sterilised and made into meat meal for animal feeding stuffs and fertiliser.

Condemned meat and offal is stained with vegetable dye before its removal from the slaughterhouses in the city.

Other condemned food is disposed of by incineration at the Corporation Destructors.

Disposal of Bones, Sheep and Calf Heads.—These are now disposed of to Messrs. A. Schofield (Pontefract) Ltd., who also use the material for conversion into meal for animal feeding and fertilisers.

Meat and Other Foods condemned as Unsound.—The total weight of food destroyed by consent during the year was 294,263 lbs. as compared with 433,737 lbs. in the previous year. Details of food destroyed are given in the table which follows.

MEAT, ETC., DESTROYED BY CONSENT.

	1961	1960	1959	1958
Beef ..	40,788 lbs.	66,438 lbs.	94,203 lbs.	116,527 lbs.
Veal ..	9,514 ..	6,045 ..	5,649 ..	5,699 ..
Mutton ..	18,073 ..	16,730 ..	25,701 ..	15,378 ..
Pork ..	14,911 ..	18,524 ..	18,973 ..	22,366 ..
Offals ..	78,028 ..	109,739 ..	145,669 ..	188,165 ..
Bacon and Ham ..	907 ..	773 ..	313 ..	813 ..
Rabbits ..	699 ..	282 ..	1,467 ..	804 ..
Poultry ..	782 ..	715 ..	1,476 ..	858 ..
Game ..	151 ..	84 ..	509 ..	37 ..
Fish ..	9,049 ..	9,905 ..	16,123 ..	13,744 ..
Shellfish ..	2,050 ..	6,596 ..	714 ..	127 ..
Vegetables ..	57,609 ..	117,780 ..	96,938 ..	67,702 ..
Fruit ..	11,774 ..	23,065 ..	16,787 ..	9,848 ..
Tinned goods ..	45,769 ..	50,835 ..	46,363 ..	49,086 ..
Cheese ..	292 ..	223 ..	70 ..	57 ..
Edible fungi ..	116 ..	74 ..	304 ..	..
Bread and Cereals ..	..	..	479 ..	1,214 lbs.
Flour ..	..	1,605 lbs.	140 ..	..
Confectionery ..	..	51 ..	..	138 lbs.
Sundries ..	3,751 lbs.	4,273 ..	3,989 lbs.	19,898 ..
Totals ..	294,263 lbs.	433,737 lbs.	475,867 lbs.	512,461 lbs.

Shellfish.—Eleven samples of mussels were taken during the year for the purpose of bacteriological examination. Nine of these samples originated from layings in Wales, one from Denmark and one from Irish layings. Satisfactory results were obtained by the bacteriologist in tests on six samples, whereas samples classified as less than satisfactory were reported on as follows:—“fairly satisfactory”—3 samples, “suspicious”—one sample, “unsatisfactory”—one sample, the latter sample originating from beds in the Killorglin area.

The three “fairly satisfactory” samples and the “suspicious” sample originated from Welsh sources, having been through an approved purification station. Enquiries by Departmental Inspectors revealed that in some cases consignments of mussels were arriving in Leeds Market in sacks from which the purification station labels had been either partially or wholly removed. The possibility of these

labels being removed by unscrupulous persons with the object of concealing delays in the delivery of the consignments could not be entirely discountenanced. Another suggestion concerning improperly labelled or inadequately secured bags of shellfish was that they contained shellfish which had not, in fact, been through a recognised purification station. In order to assist in the tracing of persons suspected of perpetrating such malpractices a sample sack was forwarded by the Public Health Inspector to the Officer-in-Charge of the Welsh Purification Station concerned. A close watch continues to be kept on consignments from this source.

The "unsatisfactory" sample, which was labelled as purified, originated from County Kerry and full details were forwarded to the Medical Officer of Health for that area. Considerable correspondence ensued. The port health authority for the place of landing was contacted and the Irish Purification Station's Officers were furnished with complete details as to the marking of the offending consignment and the manner in which it was secured. Finally, the Medical Officer of Health for County Kerry undertook to pursue the matter in the area of production.

Salmon and Freshwater Fisheries Act, 1923.—No action was found to be necessary under this Act during the year, inspections of fish on sale in the city not disclosing any contravention of the appropriate legislation.

Fruit and Vegetables.—A large proportion of the vegetables condemned during the year consisted of washed carrots, pre-packed in polythene bags. Many of these consignments arrived in a sweated and mouldy condition, being unfit for human consumption. The general standard of packing and overall quality, however, has tended to improve. A large consignment of bananas was condemned during the period under review; these had become inedible due to temperature increases in course of transit by rail.

Rabbits.—Very few condemnations were required in the case of rabbits arriving in the City Market. Only 5 per cent. of the rabbits examined originated from British sources. The majority stemmed from Australian dealers (about 75 per cent. in all) whilst 20 per cent. were imported from China.



FOOD SAMPLING

Public Health Inspector taking samples of mussels for bacteriological examination from a retailer in the Kirkgate Market, Leeds. Shellfish were regularly sampled and appropriate action taken in the case of five samples classified as Less than Satisfactory during the year.

Fish.—As a result of a demand for higher standards of freshness at the ports of landing, the quality of fish arriving throughout the year in the City Market has improved somewhat. Another factor which has affected an improvement in the quality of fish on sale locally is the prohibition by the Norwegian Fishery Authority of the use of nets in halibut fishing, fish now being caught by line. The new methods have resulted in a decrease in bruising, with consequent lower condemnation figures. Notwithstanding this improvement, however, a number of consignments of halibut were condemned by reason of bruising during the year.

A further increase in the use of non-returnable boxes was observed in the City Market. The lack of cleanliness of fish boxes has presented problems occasioning concern to public health inspectors for a number of years; the increased utilisation of the non-returnable container represents a considerable advance in this field of hygiene. A further sign of progress in this matter is the suggestion that the introduction of grease-proof paper linings be considered. Such a measure would have the dual advantage of protecting the fish and of conserving natural moisture.

Radioactivity Measurement.—During the latter part of the year samples of calf, ox and sheep thyroid glands were submitted to the Department of Medical Physics at the General Infirmary, Leeds. The glands were assessed for radioactivity as part of the process of determining the extent of radioactive fall-out in Northern England and Scotland during a period subsequent to nuclear explosions.

Salmonella Research Samples.—As part of the large-scale investigation into the nature and origin of salmonella infection being conducted by the Public Health Laboratory Service, the Department were requested during the year to arrange for swabs to be inserted in the drainage system of the Public Abattoir and one other private slaughterhouse in order that the swabs might later be submitted for bacteriological examination and typing.

It is hoped that the information thus gained will be of some assistance in a specific investigation into the relationship between *Salmonella paratyphoid B* occurring in slaughterhouses and the same organism present in human infections thought to be foodborne.

DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Chief Public Health Inspector

Tuberculosis Order, 1938.—No cases of bovine tuberculosis were reported during the year but a number of tuberculin reactors were received at the Public Abattoir, having been moved under licence from the premises of origin.

Swine Fever Order, 1938.—During the year under review thirteen suspected cases of swine fever occurred at premises in Leeds. Seven of these cases occurred at piggeries within the city, the remainder being reported from the city slaughterhouses. Details of piggeries affected by the outbreaks are appended:—

Date of Declaration of Infected Place	Name of Pigkeeper and address of Piggeries	Date of Confirmation of existence of Swine Fever
6.1.61	Willie Dyson, Moor Top, New Farnley, Leeds	6.1.61
14.1.61	H. Adamson & Son Ltd., Stanks Farm, Leeds 15	14.1.61
12.4.61	H. Jackson, Highbury Poultry Farm, Leeds 6	20.4.61
8.5.61	C. Threapleton, Rock Ridge, Leeds 13	17.5.61
28.8.61	A. E. Whitehead Ltd., Windmill Hill Farm, Leeds 11	Not confirmed
1.7.61	C. Threapleton, Rock Ridge, Leeds 13	10.7.61
7.11.61	W. Spence, 4 Brown Lane, Leeds 11	No confirmed

Carcasses from Infected Places were disposed of by incineration at one of the Corporation Destructors under letter of authority from the Chief Public Health Inspector. In the cases diagnosed at the city slaughterhouses the appropriate section of the premises was declared to be an "Infected Place" under the Diseases of Animals Act pending processes of cleansing and disinfection.

Regulation of Movement of Swine Order, 1959.—Swine Fever (Infected Areas Restrictions) Order, 1956-8.—During times when swine fever shows no special prevalence the movement of porcine animals is controlled by the Regulation of Movement of Swine Order. At other times, however, the disease statistics indicate the onset of an epidemic and special measures of control are required. During 1961 such a situation arose, a large number of cases of swine fever having occurred in the West Riding area. During a Swine Fever epidemic the practice is to regulate the sale and movement of swine by the imposition of specific Infected Areas and the City of Leeds was included in such an Infected Area for a period of six months. During the period of the operation of these controls 1,498 animals were exposed for sale at the Whitkirk Auction Mart under local authority permit, being removed therefrom by the issue of 213 licences. All these animals were consigned for immediate slaughter within the Infected Area. In addition, 1,309 licences were issued for the movement of animals within or out of the Leeds City area.

The total number of licences issued under both Orders during the year was 1,678; these licences permitted the movement of 1,847 animals from the Whitkirk Mart and some 5,000 animals within or out of the city from pig-keepers' premises.

Foot-and-Mouth Disease.—The city was included in restricted areas on two occasions during the year. On one occasion "Controlled Area" restrictions were imposed. On another the city was declared to be an "Infected Area" for the purposes of the Diseases of Animals Act.

Controlled Area Restrictions.—These restrictions were imposed by reason of the discovery that a number of "contact" animals had been consigned to various parts of the Midlands and the North immediately prior to the outbreak of the disease in the Oswestry area, further outbreaks thus become a distinct possibility. Included in these consignments were a number of calves despatched to Leeds Abattoir. During the period of the operation of the "Controlled Area" 381 animal movement licences were issued by the Departments Officers, covering the movement of 5,700 animals. The Whitkirk Auction Mart was allowed to continue functioning, being specially authorised for this purpose.

Infected Area Restrictions.—On 27th February, following an outbreak of Food and Mouth disease at Low Moor, Bradford, a telegram was received by the Chief Public Health Inspector to the effect that the City of Leeds had been designated an "Infected Area".

Erection of Warning Notices.—By special pre-arrangement with the City Police Mobile Division, Infected Area Warning Signs were erected at the points of ingress to the city on all main roads crossing the Infected Area boundaries. One of the objects of these signs is to warn livestock transport drivers that movement beyond the point specified is subject to licence control.

Whitkirk Auction Mart.—The Foot and Mouth Disease (Infected Area Restrictions) Order prohibits the holding of livestock markets otherwise than in accordance with the conditions of an Authorisation granted by the local authority, such markets being prohibited absolutely unless they be situated not less than five miles from any Infected Place. The normal weekly markets at Whitkirk were duly authorised throughout the period of the restrictions. The conditions imposed by the Department specified *inter alia* that animals exposed for sale were to be confined to those intended for immediate slaughter. During the outbreak a Public Health Inspector was in attendance at the market each week to ensure that this provision was implemented.

Vehicle Cleansing and Disinfection.—All vehicles bringing animals into Leeds for slaughter during the operation of the Infected Area restrictions were compulsorily disinfected under the supervision of the Department's inspectors in accordance with the requirements of the Order.

Removal of Animal Waste-Products.—Stringent control is required to be exercised by the local authority in relation to the removal of slaughterhouse refuse, waste meat trimmings, farmyard manure and similar potentially infective matter in an Infected Area. Written authorisations were insisted on in relation to the movement of all such material during the operation of the restrictions.

Livestock Movement.—The movement of livestock is also subject to strict supervision during Foot and Mouth outbreaks and considerable powers are vested in the local authority in this regard,

DISEASES OF ANIMALS ACT

Public Health Inspector supervising the cleansing and disinfection of vehicles used for the transport of live stock under the
Foot-and-Mouth Disease (Infected Areas Restrictions) Order of 1938.



these being exercised through the medium of licensing control. The issue of licences has a triple objective (a) the securing of effective restrictions on unnecessary livestock movements, (b) the isolation for an appropriate quarantine period of newly-moved stock and (c) tracing of movements in the event of subsequent outbreaks.

The function of licensing being the responsibility of the "destination authority", a local authority for an area such as Leeds, in which animals are received for slaughter at the rate of some 17,000 a month, finds itself faced with a considerable volume of work, and responsibility in this regard. No less than 525 such licences were issued by the Departmental officers in the space of a little more than a fortnight, whilst many applications for licences had, of necessity to be refused.

Fowl Pest Order of 1936.—Four suspected cases of fowl pest were reported during the year as having occurred at farms or other premises in the city. Form A, declaring the premises to be an "Infected Place" for the purposes of the Diseases of Animals Act, was served in each case. The Disease was confirmed in three cases. In all confirmed outbreaks the carcases of slaughtered stock were disposed of by incineration.

The Poultry Pens, Fittings and Receptacles (Disinfection) Order, 1952: The Poultry Premises and Vehicles (Disinfection) Order, 1956.—During the year 129 visits were paid to poultry dealers in the city for the purpose of inspecting their premises, vehicles and equipment. No contraventions warranting legal action were observed during these inspectional visits.

The Warble Fly (Dressing of Cattle) Order, 1948.—In connection with the enforcement of this Order copies of the relevant statutory provisions were delivered in pamphlet form to cattle-owners throughout the city, together with pre-paid post-cards for return to the Department in the event of the discovery of infestation. Ministry posters were displayed at various points in the city. 112 visits were paid to farms for the purpose of animal inspection and 573 non-infested cattle were treated voluntarily by the farmers in the city, a figure which indicates the continued co-operation of the farmers concerned. Inspection of infested animals was carried out by the

Department's Inspectors, as was also the case with animals consigned to farms in the city on importation licences. The number of infested cattle found showed a slight decrease (112 in comparison with 133 the previous year).

The following table indicates the comparative statistics for the previous triennial period:—

		1959	1960	1961
Number of visits paid to farms	.. ..	147	82	112
Number of cattle inspected on farms	.. ..	1,052	591	544
Number of leaflets and post-cards distributed	.. ..	49	45	57
Number of cattle infested	.. .. ..	51	133	112
Number of infested cattle treated	.. .. ..	51	133	112
Number of non-infested cattle treated voluntarily	.. .. ..	503	701	573

Sheep Scab Order, 1938.—Farms at which sheep are kept were visited during the year under this Order. Although compulsory dipping has been enforced until recent times this is now considered to be a matter for the personal decision of the individual farmer rather than one necessitating the continuance of enforcing legislation. Sheep Scab was once a serious problem in this country but largely as a result of the strict enforcement of the Sheep Dipping Regulations the disease has now virtually disappeared. Occasional cases have been discovered from time-to-time in imported animals as a result of routine inspection at the places of landing.

All sheep coming into the country are now required to be dipped before leaving the landing place, and any animals showing signs of disease are despatched for immediate slaughter. No cases of Sheep Scab have occurred in the West Riding since 1950 and none in Great Britain since 1952.

Having made due enquiries into the local situation, it was decided to recommend that the Health Committee accept Ministerial suggestions on the matter and revoke the existing local Sheep Dipping Regulations. This recommendation was approved by the Committee at its September meeting.

It should be borne in mind that the principal Order under which the Regulations were made furnishes the local authority with

extensive powers. These should prove adequate to deal with any possible future outbreaks. These provisions include measures for the detention of affected sheep and the restriction of movement of animals in specified areas. The Sheep Dipping Regulations are, moreover, capable of reintroduction at any time, should circumstances render such a measure desirable.

The following farmers undertook the dipping of sheep during the year under the supervision of the Department's Inspectors.

Oswald Lister, Black Hill Farm, Eccup,					
Leeds 16	90	sheep dipped			
Caleb Peat, Owlet Hall Farm, Eccup, Leeds 16	59	sheep dipped			
George Whitfield, Park Farm, Colton, Leeds 15	42	sheep dipped			

Animals (Landing from the Channel Islands, Isle of Man, Northern Ireland and the Republic of Ireland) Order, 1955.—During the year 5,637 Irish sheep and pigs were received under licence for immediate slaughter at the Public Abattoir, Leeds and the L.I.C.S. Ltd., Slaughterhouse, Gelderd Road, Leeds, a considerable fall on the previous year's figure for imported sheep and pigs. (Actual decrease of 7,224).

Disease of Animals Act, 1950 (Second Schedule).—There was also a fall in the number of cattle imported from Ireland during the year, 8,689 bovine animals being imported under licence for immediate slaughter in the city, a decrease of 2,127 over the previous year. 100 Irish store cattle were consigned from the ports of landing to farms in the city, a decrease of 47 compared with the previous year.

Diseases of Animals (Waste Foods) Order, 1957.—During the year further applications were received from 14 boiling plant operators under this Order. In all cases the plant and equipment was subject to inspection by the Departmental officers and the licences granted. 84 visits were paid in connection with the Order; the number of licensed operators now stands at 116.

Legal Proceedings.—No contraventions necessitating the institution of legal proceedings came to the notice of the Department during the year.

General Sanitation

INSPECTION OF FACTORIES

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Chief Public Health Inspector

Mr. J. Norton, Supervisory Inspector of the Factories Section, has furnished details for this part of the Report.

The Factories Section of the Department has continued to deal with the inspection of factories, offices and shops in the city during the year. The Section was also concerned in the administration of the enforcement of the Clean Air Act, 1956. Details of Smoke Abatement work including the establishment of Smoke Control Areas are set out in the section of the Report which deals with the prevention of atmospheric pollution.

Factories.—The inspection of factories has been carried out by inspectors in the Factories Section and details of the work done in this connection are set out in the four tables printed on pages 205 to 207.

Under the provisions of Section 128(3)(a) of the Factories Act, 1937, the Medical Officer of Health of every Council of a Borough or County District is requested in his Annual Report to the Council, to report specifically on the administration of, and to furnish the prescribed particulars with reference to, matters under Parts I and VIII of that Act which have been delegated to the District Councils for administration, and a copy of this Annual Report is to be forwarded to the Ministry of Labour.

Certain duties in connection with means of escape from factories in case of fire which previously were dealt with by inspectors working under the direction of the City Engineer, were, during the year, transferred to officers of the Fire Prevention Department of the City Fire Brigade under the direction of the Chief Fire Officer. No details of the work done in this connection are available.

The four tables mentioned above include two which show details of inspections of factories for the purpose of the provisions as to health, and the number of cases in which defects were found, and represent the work of the male inspectors of the staff. The other two tables refer to outwork, and to certain other matters, some of which are dealt with by the female inspector.

The Register of Factories which the City Council is required to keep now contains the addresses of 160 non-mechanical factories and 2,854 mechanical factories.

A slight decrease in the numbers of both types of factories in the register for 1961 is apparent when compared with those on the register during 1960. In addition to the factories contained in the Register there were during the year some 64 other premises in which Section 7 of the Factories Act, 1937, is enforced by the City Council. The section deals with the provision and maintenance of sanitary accommodation, and premises consist principally of works of building and engineering construction.

During the year 1,715 inspections of mechanical and non-mechanical factories were made to ascertain whether the provisions of the Factories Act were being contravened. Contraventions of the Act and other defects were found in 437 instances during the year, and 364 of these were remedied by the end of the year. In connection with these contraventions 125 written notices were served, together with numerous verbal intimations. All works outstanding at the end of the year will be followed up and enforcement action taken where necessary. There has been no necessity to institute proceedings to enforce compliance with the Act during the year.

There were on the Register 64 sites on which works of building or engineering construction were proceeding. It is the responsibility of the Council to enforce those provisions of the Factories Act which deal with sanitary accommodation on these sites. During the year some 50 visits were paid to sites where such works were in progress. In no case was it necessary to serve written notice but adequate sanitary conveniences have been provided on verbal notice in certain instances. During the year very few complaints were received regarding the absence of, or the siting of the conveniences—those

which were received were speedily and satisfactorily resolved. Generally on large sites sanitary conveniences connected to a water carriage system of drainage are provided, on smaller sites it is usual for a suitable chemical closet to be provided properly screened and away from occupied properties. Deodorising fluids are used and are accepted by this Department as reasonable.

The table which lists the cases in which defects were found is printed on page 206 and contains details of 67 reports which were received from H.M. Inspectors. In 61 cases these referred to unsuitable or insufficient sanitary conveniences for employees, 5 cases referred to the lack of cleanliness in workrooms, whilst one case concerned unreasonable temperature in a workroom. Action has been taken to deal with all these complaints.

One complaint of want of cleanliness in a workroom of a mechanical factory, and six cases where no Abstract of the Act was displayed, were referred to H.M. Inspectors for their attention. During the year four non-mechanical factories were found to be in a dirty condition, and one where a reasonable temperature was not maintained in the factory. One case which was found late in the year still remains outstanding, the other four matters being satisfactorily remedied. In 432 cases repairs to unsatisfactory sanitary accommodation or the provision of additional accommodation were dealt with.

The table which is headed "Other Matters" shows the number of bakehouses on the Register to be 155, of these 154 are mechanical bakehouses and one non-mechanical. The number does not include all bakehouses in the city, there being several small family operated bakehouses which H.M. Inspectors do not regard as registerable under the Factories Act.

There are no basement bakehouses in the city for which certificates of suitability under the Factories Act have been issued.

The tables printed on pages 205/6 setting out the visits paid to factories and work carried out in factories, refer only to the work done under the provisions of the Factories Act which have been delegated to the City Council. Other visits relate to work on other matters outside the provisions of the Factories Act. Nuisances are dealt with under the provisions of the Public Health Acts, inspections

of boiler plant and smoke observations are carried out under the Clean Air Act, and in the case of food factories, regular inspections are made to ensure that the provisions of the Food and Drugs Act and the Food Hygiene (General) Regulations, 1960, are complied with. Details in connection with these matters are included in the table of work done by public health inspectors, which is set out on page 223.

During the year Inspectors in the Factories Division made 137 visits to canteens and other food premises in the city and dealt with some 98 contraventions of the Food Hygiene Regulations which were found at those premises.

With regard to the matters dealt with by inspectors under the provisions of the Public Health Act, 1936, numerous types of nuisance are investigated including nuisances from dust and fumes from various processes and from other sources, together with complaints of smells which originate in general from paint spraying and similar processes. In particular a complaint made by the management of a hotel in the city centre referred to fumes which developed into a nuisance affecting a section of the business part of the city.

This was found, after a great deal of enquiry, to be due to a loss of petrol from a leaking storage tank percolating to the sewer. This in its turn brought to light various defective drains. Some 200 visits to premises to trace this cause were necessary.

Certain complaints which were received concerned factories which are registered under the provisions of the Alkali Etc. Works Regulations Act, 1906. All such cases were referred to the District Alkali Inspectorate for such action as they may be able to take. A close liaison exists between the Health Department and the Alkali Inspectorate.

Noise.—Complaints of noise and vibration continue to be received. These are dealt with under the provisions of Section 134 of the Leeds Corporation Act, 1956, and Section 1 of the Noise Abatement Act, 1960. Nineteen cases of alleged noise or vibration nuisance were reported, five of which were found not to be justified. Ten cases were satisfactorily abated by either reducing the noise to

below nuisance level, or preventing it entirely. Four cases were outstanding at the end of the year but are still under investigation. These nuisances ranged from noise from band-saws, the hammering and handling of metal, vibration from tailors' cloth-cutting machines, to noise from the exhaust pump attached to vacuum presses, etc.

It has not been found necessary during the year to institute legal proceedings, the management of firms approached to reduce noise are usually ready to co-operate, in some cases by re-siting noisy machinery, which may prove very expensive and which may involve the complete re-organisation of their production lines.

General.—Nuisances other than those created by works processes have frequently to be dealt with by public health inspectors of the Factories Division. These generally concern defects to the structure of factory buildings which affect the health and comfort of the work-people, and which may be regarded as prejudicial to health. Such defects may be leaking roofs, defective and leaking drainage or eaves-spouts which may cause dampness to the building and other matters of a like character.

Frequent visits are made to supervise the larger premises in the city which are concerned with the production of foodstuffs. In addition many factories have been provided with canteens and mess-rooms for use by employees. Inspectors spend a great deal of their time visiting these factories and canteens to ensure that the provisions of the Food Hygiene (General) Regulations, 1960, are complied with.

Details of this part of the inspectors' work are included in the section of the Report dealing with Food Hygiene. The establishment of a messroom or canteen and kitchen is in many cases found to be shown when plans are submitted for proposed new factories, and the department is able to comment upon the detailed layout at this time.

For many years an arrangement has existed whereby the City Engineer's Department and this Department have exchanged information on the establishment of factories in the city, and this

affords an opportunity of passing opinions upon the siting of particular processes in certain districts of the city. Copies of the lists of changes of occupation of factories which were received from H.M. Inspectors were forwarded to the City Engineer.

Outworkers.—The number of outworkers in the August list was 954. 890 of these were concerned with the making of wearing apparel and 64 with textile weaving. The number of addresses of outworkers received from other authorities was 245, and the number sent from Leeds to other authorities was 341. There were no cases of notifiable disease at outworkers premises during the year.

Workplaces.—During the year 310 visits were paid to workplaces, including offices. In one case of a complaint towards the end of the year it was necessary to serve notice requiring the cleansing of a dirty office and contents. This case will be followed up to secure satisfactory conditions for the persons employed.

Shops.—The provisions of Section 38 of the Shops Act, 1950, are administered by the Health Committee. During the year 360 visits were made by public health inspectors to shop premises. In general conditions were found to be satisfactory, only five defects were found and remedied during the year.

**INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH INSPECTORS)**

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	160	11	4	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	2,854	1,704	121	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	64	50	..	..
Total	3,078	1,765	125	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted	
			Referred			
	Found	Remedied	To H.M. Inspector	By H.M. Inspector		
Want of cleanliness (S. 1) ..	4	3	1	5	..	
Overcrowding (S. 2) ..	..	..	..	..	..
Unreasonable temperature (S. 3) ..	1	1	..	1	..	
Inadequate ventilation (S. 4) ..	..	4	..	..	..
Ineffective drainage of floors (S. 6) ..	..	..	..	..	..
Sanitary Conveniences (S. 7)—						
(a) Insufficient ..	12	23	..	3	..	
(b) Unsuitable or defective ..	416	330	..	53	..	
(c) Not separate for sexes ..	4	3	..	5	..	
Other offences against the Act (not including offences relating to Outwork) ..	..	..	..	..	..
Total	437	364	1	67	..	

OUTWORK

Sections 110 and III

Nature of Work	SECTION 110			SECTION III		
	No. of out-workers in August list required by Sect. 110(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing apparel:— Making, etc., Cleaning and Washing ..	890	..	..	..	..	..
Textile weaving ..	64	..	..	..	..	..
Total	954	..	..	..	..	..

OTHER MATTERS

			Number of	
			Lists	Outworkers
Homework :—				
<i>Lists of Outworkers</i> (S. 110) :—				
Lists received twice in the year			C. 364	W. 1,938
" " once in the year			5	8
Addresses of } received from other Authorities.. ..				245
outworkers } forwarded to other Authorities				341
Notices to occupiers as to keeping or sending lists ..				370
Inspection of Homeworkers' premises .. ..				..
Matters notified to H.M. Inspectors of Factories :—				
Failure to affix Abstract of the Factories Act, 1937				
(S. 128)				6
Action taken in matters referred by				
H.M. Inspectors	Notified by H.M. Inspectors .. Reports (of action taken) sent to H.M. Inspectors..			67
				67
Total number of factories on Register				3,014
The above includes 155 bakehouses.				

SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.

Chief Public Health Inspector

Water.—During the year 408 samples of drinking water were taken by the Department for bacteriological examination. 380 of the samples were taken from the Corporation's mains supply, 23 samples were taken from springs and 5 samples were taken from bore holes. 14 samples of town's water were unsatisfactory, but subsequent samples taken from the same domestic taps proved satisfactory. 17 samples taken from springs were unsatisfactory and 2 samples taken from bore holes were unsatisfactory.

Sewage Disposal.—(**Report of Mr. D. Currie, City Engineer.**)—During 1961, 6 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure for 1960 was 7 to 8 per cent. The average analyses of final effluent at Knostrop Sewage Works from January 1st to 31st December, 1961 were:—

Oxygen absorbed in 4 hours ..	2.67 parts per 100,000
Suspended solids	5.6 parts per 100,000

Extensive experimental work is being carried out at Knostrop Sewage Works with a view to determining the best method of achieving the standard of effluent which will be required by the River Board. Consideration of the design for extensions as are envisaged is proceeding, and it is anticipated that a programme of construction will commence in the comparatively near future. The control of trade effluent is also receiving consideration, and a scheme is being drafted in relation to this matter.

Public Cleansing—(**Report of Mr. G. F. Mellor, Director of Public Cleansing.**)—Particulars of refuse collection and disposal during 1961 are as follows:—

		<i>Tons</i>
Household refuse and nightsoil collected ..	..	163,412
(a) dealt with at destructors ..	..	68,651
(b) disposed of at tips and for agricultural purposes ..	..	80,964
(c) Number of tons of cesspool contents discharged into Corporation sewers ..	..	13,797

The quantity of screened refuse dust sold as manure to farmers was 5,870 tons.

Dustbins and Ashpits.—The number of dustbins provided by the Cleansing Department and delivered to dwelling houses in Leeds during the year was 9,145. The total number provided since the inception of the scheme in December, 1946, is 179,088.

During the year the Health Department secured the abolition of 2 ashpits and the Corporation approved grants-in-aid amounting to £11 7s. 8d. in connection with the abolition of these ashpits.

Ashpits, Cavalier House.—Cavalier House is a privately owned 3-storey block of flats and the arrangements for dealing with household refuse at these premises had been unsatisfactory for many years. There are 41 separate flats in the block and domestic refuse from each flat was discharged by a chute system into six raised ashpits. These ashpits had been a source of nuisance, particularly at the time of emptying by the Cleansing Department when the contents had to be shovelled from the ashpit bottom into receptacles and then carried to the Cleansing Department vehicles. At all times, but particularly when there was a strong wind, this operation created nuisance.

The best solution to the problem was the abolition of the existing ashpits and the adaptation of existing chutes so that they were made to deliver the refuse into six new metal refuse containers of 1*1/2* cubic yards capacity, suitable for use with the carrier type container bulk loader used by the Cleansing Department.

The owners agreed to carry out this work, the cost of which amounted to £1,001 15s. 4d. The Cleansing Committee agreed to provide new refuse containers at a cost of £123 10s. and the Health Committee made a grant of £585 10s. 3d. towards the cost of the abolition of the ashpits.

Water Supply (Report of Mr. K. L. Forster, General Manager and Engineer of the Waterworks Department).—Bacteriological examinations of raw water arriving at Headingley Filtration Works were made during the year, and the water going into supply after filtration and chlorination was also classified. The following table shows the results of these examinations.

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works	No. of samples	Average Count
Probable No. of Coliform bacilli in 100 ml. water ..	307	208
Probable No. of B.Coli Type 1 in 100 ml. water ..	307	113
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..	49	2
Agar Plate Count, 48 hours at 37°C. Colonies per ml. ..	48	26

WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION

(a) Water entering the Distribution System

No. of samples Examined	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
975	99.8%	0.1%	Nil	0.1%

(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)

No. of Samples	Satisfactory	Suspicious	Unsatisfactory
792	98.8%	0.6%	0.6%

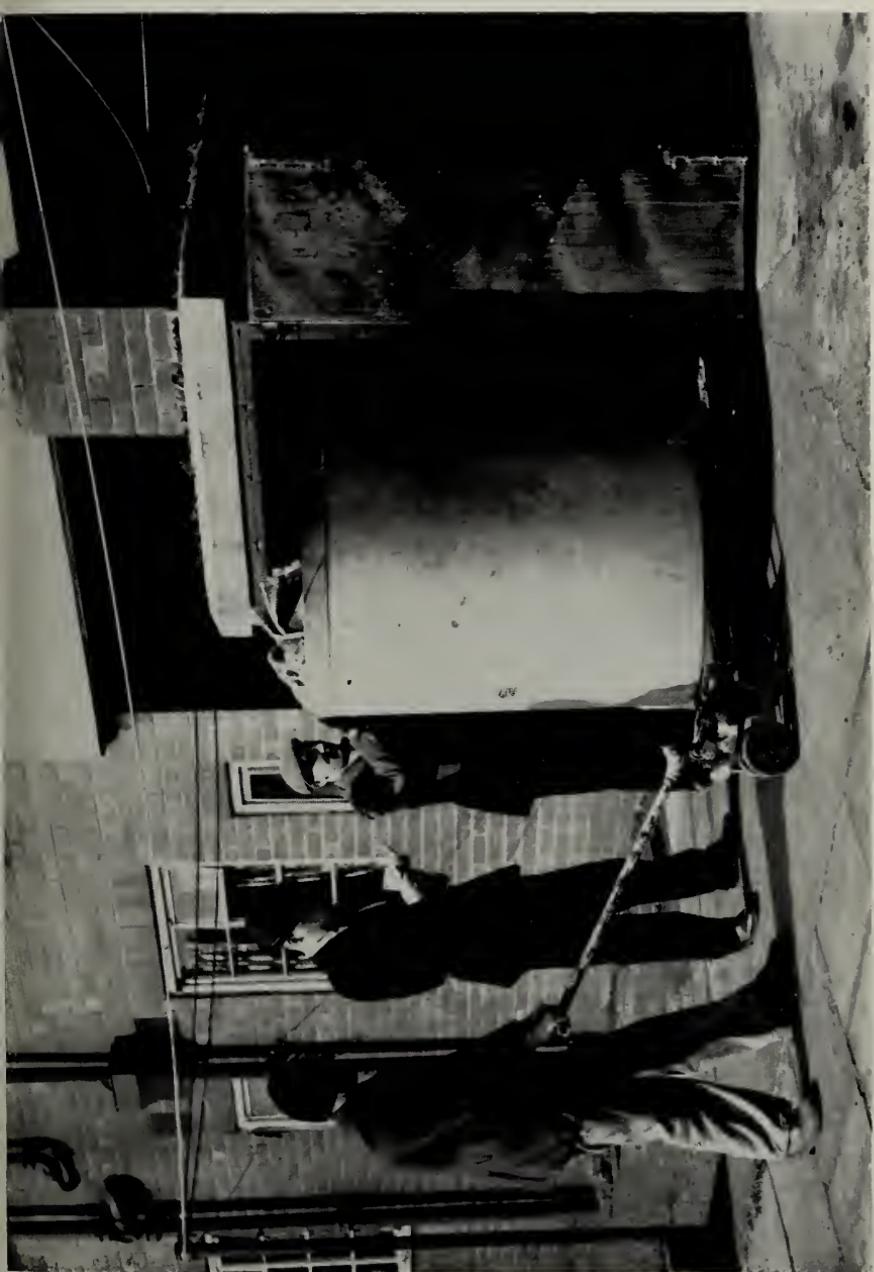
Plumbo-Solvency.—Water leaving the storage reservoir at Eccup is treated with lime, at the rate of approximately 5 p.p.m., with the object of producing a water which, after filtration and chlorination, is not plumbo-solvent.

Regular determinations of pH and alkalinity are made on samples of water taken from various points in the distribution system and the determination of lead is included in the chemical analysis of samples which have been drawn through lead pipe. The maximum amount of lead found during 1961 was 0.1 p.p.m.

During the year 173 samples of town's water from the public supply were subject to chemical analysis and the table which follows summarises the results of these analyses.

CAVALIER HOUSE—EAST STREET

Ashpits serving these premises were abolished with the aid of a Corporation grant and the existing refuse chutes were adapted so as to discharge into new 1½ cubic yard metal containers suitable for use with the Cleansing Department's bulk loading vehicles.



SUMMARY OF CHEMICAL ANALYSES OF THE PUBLIC WATER SUPPLY FOR
THE YEAR ENDED DECEMBER 31ST, 1961. SUMMARY BASED ON 173
ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY.

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
	Less than	3	2
*Turbidity (Silica scale)	2	3	2
*Colour (Hazen Units)	17	35	5
*pH.	7.3	8.4	6.8
Free Carbon Dioxide	1.7	2.8	0.8
Alkalinity (Carbonate or temporary hardness) (in terms of CaCO_3) ..	19.5	24	14
Total Hardness (in terms of CaCO_3) ..	54.5	64	44
Non-Carbonate (Permanent) Hardness (in terms of CaCO_3)	35.0	44	25
Oxygen absorbed from Permanganate in 4 hours at 27°C.	1.64	3.0	0.72
Ammoniacal Nitrogen (in terms of N) ..	0.003	0.010	Nil
Albuminoid Nitrogen (,, ",,") ..	0.034	0.089	0.015
Nitrite Nitrogen (,, ",,") ..	Nil	Nil	Nil
Nitrate Nitrogen (,, ",,") ..	0.52	0.80	0.25
Chlorine present as Chloride (in terms of Cl)	15	18	13
Silica (in terms of SiO_2)	7	9	6
Iron compounds (in terms of Fe) ..	0.03	0.45	Nil
Manganese .. (,, ",, Mn)	Nil	Nil	Nil
Lead .. (,, ",, Pb)	0.01	0.10	Nil
Total solids dried at 180°C.	96	120	84
*Electrical Conductivity—			
Micro-ohms/CM ₃ at 20°C.	139	148	128
Residual Chlorine (on reaching consumer) Nil/Trace			

* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City and weekly determinations on samples from Service Reservoirs

Action in respect of any form of contamination.—There were no instances of serious pollution during the year. On one occasion, samples from a small area in the Wortley district were unsatisfactory on account of high coliform counts. On investigation it was found that the mains in this area had recently been descaled and presumably some soil had entered the mains during the operation. After treating the mains with heavily chlorinated water, followed by thorough flushing, satisfactory samples were obtained. The total length of mains involved was approximately 250 yards.

Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains.—(a)(i) Number of dwelling houses and dwelling-houses attached to shops within the City of Leeds boundary—182,300 (estimated), (b) Population supplied from the public water mains: (i) direct to houses within the City of Leeds boundary—511,650 (ii) By means of standpipes—none.

The estimated number of cistern water-closets in use within the city boundary at 31st March, 1962, was 214,100.

Keeping of Animals.—The number of pig-keepers in the city decreased to 133 and the number of pigs kept was of the order of 3,000.

Closet Accommodation.—Two privy middens serving isolated farms in the city were abolished during the year. Due to the fact that a Corporation sewer was not available these privy middens could only be abolished by providing pail closets and dustbins in lieu. The Health Committee agreed to bear the cost of the structural work necessary in these cases, and the Cleansing Committee agreed to provide pail closets and dustbins without charge to the owners of the premises concerned.

A total of 153 statutory notices was served under the provisions of Section 45, Public Health Act, 1936, in connection with closet accommodation. In the owners default the water-closets appurtenant to 12 houses were repaired at a cost of £37 18s. 4d.

Offensive Trades.—The number of premises in the city where offensive trades are carried on is 110. During the year 39 visits of inspection were made.

Common Lodging Houses.—During the year 243 visits of inspection were made to the six common lodging houses in the city.

Houses-let-in-Lodgings.—The total number of visits paid to houses of this type was 274.

Caravan Sites.—51 Cardigan Lane—*Camping Site.*—No application was received for the renewal of the licence under Section 147 of the Leeds Corporation Act, 1956, which duly expired on 31st March, 1961. The site was then closed and all caravans were removed from the site.

Wentworth Farm, New Farnley.—The Licence issued under the Caravan Sites and Control of Development Act, 1960, continued in force subject to the following conditions:—

1. That not more than eight caravans be allowed on the site at any one time.
2. That the caravans be of the modern trailer type of proprietary make, in good condition, and readily mobile.
3. That every caravan be not less than 20 feet from any other caravan in separate occupation.
4. That suitable footpaths not less than 2 ft. 6 ins. wide with a hard surface be provided, leading to each caravan standing and to the toilet block.
5. That every caravan stand on a hard standing of suitable material which must extend over the whole area occupied by the caravan placed upon it, and project not less than 3 ft. outwards from entrance or entrances of the caravan.
6. That water stand-pipes with an adequate supply of towns' water be situated not more than 60 ft. from any standing and that such water supply be maintained and be properly protected against damage by frost.
7. That each caravan standing have proper provision for the disposal of waste water by means of a trapped drain inlet connected to a public sewer.
8. That the two existing water closets provided for men and for women be properly maintained and suitably indicated.
9. That a suitable shower or bath with a constant supply of hot and cold water be provided.
10. That laundry facilities in a separate room consisting of at least one deep sink with constant hot and cold water be provided.

11. That proper surface water drainage for the footways and paved areas and for the site generally be provided.
12. That each caravan standing have a galvanised metal dust bin.
13. That suitable receptacles be provided for the storage of solid fuel in connection with every caravan using such fuel.
14. That a suitable fire-point, equipped with a water tank provided with a hinged cover, two buckets and one hand-pump or other approved fire-fighting appliances be provided in a readily accessible position.
15. That suitably surfaced parking places for cars be provided.
16. That the trees on the site be preserved.
17. That at all times when caravans are stationed on the land for the purposes of human habitation, a copy of the licence as for the time being in force shall be displayed on the land in some conspicuous place.

Canal Boats.—The number of canal boats on the register at the end of the year was 120, one new canal boat being registered during the year. Periodical visits of inspection were made to wharves and locks and the number of boats inspected during the year was 289. Two boats required repairs to leaking decks and the necessary works were carried out by the owners after receiving verbal notice.

Public Sewers.—During the year 1,069 public sewers affecting 3,532 houses or other premises were cleansed at a cost to the Department of £1,818 15s. 5d. Works of repair or maintenance were carried out to 131 defective public sewers, and the cost of this work amounting to £1,340 4s. 9d. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 3,030 drain tests, 120 of these being in respect of new drains relaid in place of those found defective. A large number of informal notices was served on the owners of property for drainage repairs and in 288 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains of 16 houses were repaired or renewed

by the Department in default as a matter of urgency at a cost of £61 2s. 7d. which was recovered from the owners of the premises concerned.

151 statutory notices were served under the provisions of Section 111, Leeds Corporation Act, 1956, requiring the removal of stoppages from drains within 48 hours. 53 such drains were cleansed by the Department in default at a cost of £91 7s. 7d. which was recovered from the owners concerned. The drains of 1,705 houses or other premises belonging to Corporation Departments were cleansed, repaired or renewed at a cost of £2,073 18s. 2d. which was recovered from the Departments concerned.

The cleansing and repair of drains serving 492 houses was undertaken by the Department under the provisions of Section 112, Leeds Corporation Act, 1956 at the owners request, and the cost of this work, amounting to £1,024 14s. 4d. was charged to the owners concerned.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—During the year 8 certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948. The persons concerned, who were living in insanitary surroundings and unable to devote to themselves proper care and attention, were admitted to hospital.

Examination of Plans.—The arrangement whereby certain plans of new work submitted to the Building Surveyor's office are forwarded to this Department for comment continued during the year. 1,905 such plans were examined and comments made regarding necessary amendments.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 14,898. The number of complaints investigated during the year was 8,244 and 5,822 nuisances and housing defects were remedied. The tables on pages 221 to 224 give details of the work done by public health inspectors.

Notices.—The number of informal notices served in relation to Public Health Act matters was 1,821 and statutory notices served in this connection numbered 1,035.

Hairdressers and Barbers.—During the year under powers contained in Section 244 of the Leeds Corporation Act, 1956, 25 persons carrying on the trade of hairdresser or barber and their premises in the city were registered. The total number on the register on 31st December, 1961, was 477.

Sampling of Swimming Bath Waters.—During the year 29 samples of swimming bath water were taken by Public Health Inspectors and submitted to the Public Health Laboratory Service for bacteriological examination. In addition 30 samples taken from public or school swimming baths were submitted to the City Analyst for chemical analysis. Copies of the reports on the samples were forwarded either to the Director of Baths and Wash-houses or the Director of Education for information and action, if necessary.

Pet Animals Act, 1951.—Under the provisions of Section 1 of the Pet Animals Act, 1951, 7 licences were granted during the year to persons keeping pet shops, and 25 licences were renewed. Visits of inspection were made to all licensed pet shops to ensure that the conditions of the licence were being complied with.

Rodent Control.—Mr. W. Pickles, Public Health Inspector in charge of Rodent Control, has reported details of the work of the rodent operatives for inclusion in this section of the Report.

Complaints.—During the year 2,669 complaints were received by the Rodent Control Section. Of this number 1,432 referred to rats, 1,144 to mice, 57 to pigeons, 21 to damage by rabbits and 15 miscellaneous, which included squirrels, moles, foxes, cats, starlings and sparrows.

The following table shows the number of complaints of rats and mice received during the year and analysed according to months and types of premises affected.

1961	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
January	18	55	3	..	76	27	49	16	..	92
February	17	59	3	..	79	24	38	8	..	70
March ..	26	61	2	..	89	32	45	13	..	90
April ..	36	91	7	..	134	33	55	8	..	96
May ..	24	91	3	1	119	36	42	4	..	82
June ..	36	91	5	..	132	27	37	9	..	73
July ..	24	92	3	1	120	29	61	4	..	94
August ..	24	87	3	..	114	18	46	2	..	66
Sept. ..	28	102	3	..	133	20	44	8	..	72
October ..	37	104	7	..	148	53	83	9	..	145
Nov. ..	36	132	12	..	180	44	102	23	..	169
Dec. ..	21	80	6	1	108	28	54	13	..	95
Total	327	1045	57	3	1,432	371	656	117	..	1,144

B—Business Premises
PD—Private Dwellings

LA—Local Authority's premises only
A—Agricultural or Horticultural Premises

Included in the table under the headings of business premises and private dwellings are complaints of 19 Local Authority owned business premises, 215 Local Authority owned houses, where there was some measure of rat infestation, 22 Local Authority business premises, and 238 Local Authority houses where mouse infestation was reported.

Inspections.—The total number of inspections made in relation to rodent control for the year was 21,150. The number of inspections and visits made in connection with complaints received and for the servicing of infested premises was 13,043. The figure for inspection of Leeds Corporation sewer manholes was 8,107.

Sewer Baiting.—This work continued throughout the year in accordance with the Ministry's recommendations except for a short period when owing to pressure of work the second maintenance treatment was suspended in order to cover an increase in the number of complaints received.

Sewer baiting was subsequently recommenced and carried out in accordance with the Ministry's recommendations.

Treatments.—During the year 1,997 premises were serviced for some degree of rat or mouse infestation (511 business premises, 1,358 private dwellings, 125 Local Authority owned properties and 3 agricultural properties). 1,644 new infestations were recorded—797 were found to have mouse infestation and 847 to have some degree of rat infestation. Of the new infestations 1,604 premises were treated by the Rodent Control Section of the Department. At some properties where there was only slight mouse infestation, advice and instructions were given to occupiers who carried out their own treatment. At a number of business premises, after the initial treatment, semi-permanent baits were laid and inspected monthly, principally as an insurance against re-infestation.

Prevention of Damage by Pests Act, 1949.—Under the Prevention of Damage by Pests Act, 1949, the number of notices served for treatment and structural proofing was 18 (17 informal and 1 statutory).

Good co-operation has been given by owners and occupiers of premises who have readily followed the Department's advice on structural steps to make their premises rat proof. I would again like to comment on the good co-operation that has existed between other Corporation Departments, their help has been much appreciated. Small proofing works have been carried out by the rodent control staff at time of servicing, and major proofing works, carried out by private contractors, have been supervised by the Department in order to ensure that they were carried out in a satisfactory manner.

Warfarin.—During the year much publicity has been given to the question of the failure of Warfarin to eradicate mouse population. This failure of anti-coagulants has been the concern of the staff of the Leeds Health Department for a considerable time, and mention of this was made in the annual report of 1957. In 1959 certain live mice which resisted Warfarin poisoning were forwarded to the Ministry's laboratory for their observations. It was appreciated that to carry out experiments in this field could be a long and arduous task. It has now been established that some mice are more tolerant to anti-coagulants than those found in the normal run of infestation.

RODENT CONTROL—RAT INFESTED PREMISES

Inspection of yard at the side of a dilapidated stable in Low Fields Road, Leeds, showing accumulation of miscellaneous material providing harbourage for rats, and rat burrows leading to the interior of the premises.



Two premises where this resistance occurred were handed over to the Ministry who accepted responsibility for catching live mice in traps. 16 were caught and we are awaiting informed opinion as to the degree of resistance to Warfarin. This question of resistance or immunity has raised a problem, as doubts now arise as to whether treatment of an infestation will be effective where Warfarin is being used as the poisoning medium. Where damage to goods and a chargeable service is the concern of the occupier, unfavourable comments could arise as to the efficiency of the service.

At a number of premises where it was apparent that Warfarin poisoning was not effective, zinc phosphide and traps were used as an alternative method of reducing the mouse population.

No estimated kill by Warfarin has been made but during the year 2,692 dead rodents (including 70 rabbits) were collected and destroyed.

Pigeons.—During the year 57 complaints were received from occupiers of private dwellings and business premises of nuisance from feral pigeons. Each complaint was investigated and action taken in the majority of cases. The total number of inspections and visits made was 978: by shooting, trapping and netting the city's population of feral pigeons was reduced by 1,206 birds.

Sparrows in food warehouses on the outskirts of the city are a problem which has not yet been satisfactorily solved. Apart from the soiling of foodstuffs by their droppings, the damage to packet and sacked goods is extensive, and the setting off of 'ray' burglar alarms by sparrows at one building caused much anxiety to the owners and police. Sparrow traps are far from being efficient and shooting has had to be resorted to, but owing to the number of birds frequenting the premises, this is a long and relatively expensive procedure. Proofing the premises is not always a practicable proposition as the loading and unloading of vehicles cannot be intercepted by means of curtains or streamers. Occupiers are aware of the difficulties encountered and are co-operating by wiring openable windows and removing nests from the interior of the premises in an effort to discourage the birds.

General.—Hygiene is an aspect of major importance in the work of rodent control and occupiers of food premises, especially restaurants, cafes and kitchens, are advised to consider seriously the methods of stacking foodstuffs, the disposal of waste material, so that any infestation which may arise can be eradicated speedily and efficiently.

When architects or contractors are erecting or altering premises, especially food stores, enquiries as to the best method of structural proofing against rodents and other pests and vermin would be welcomed by the Health Department so that the number of places where rats and mice could find harbourage could be limited, and the possibility of any infestation would therefore be reduced to a minimum, bearing in mind the old adage that "Prevention is better than cure".

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1961.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1961.—contd.

ANALYSIS OF INSPECTIONS	North	South	East	West	Factories	Hous-	(a) Canal	Food	Total
	Div.	Div.	Div.	Div.	Div.	Div.	Boats & Common Lodging Houses	Dairies	
(b) Rodent									
RAG FLOCK AND OTHER FILLING MATERIALS ACT.									
Visits paid to premises:—									
55. Registration .....	..	..	..	..	..	..	..	..	1
56. Licensing .....	..	..	..	..	..	..	..	..	2
57. Routine inspection of Registered premises .....	..	..	..	..	..	..	..	..	..
58. Routine inspection of Licensed premises .....	..	..	..	..	..	..	..	..	..
59. Enquiries .....	..	..	..	..	..	..	..	..	..
60. No access visits .....	..	..	..	..	..	..	..	..	..
FERTILISERS AND FEEDING STUFFS ACT.									
Visits paid to premises:—									
61. Enquiries .....	..	..	..	..	..	..	..	..	..
62. Other visits .....	..	..	..	..	..	..	..	..	..
DISEASES OF ANIMALS ACTS.									
Visits paid to piggeries:—									
63. General inspection .....	..	..	..	..	..	..	..	377	37
64. Inspection of Boiling Plants .....	..	..	..	..	..	..	..	84	8
65. Enquiries .....	..	..	..	..	..	..	..	6	6
Visits paid to farms:—									
66. Warble Fly .....	..	..	..	..	..	..	..	112	11
67. T.B. Order—Disinfection .....	..	..	..	..	..	..	..	..	..
68. Foot and mouth disease .....	..	..	..	..	..	..	..	..	..
69. Anthrax .....	..	..	..	..	..	..	..	..	..
70. Sheep Dipping Regulations .....	..	..	..	..	..	..	..	7	7
Visits paid to:— /									
71. Whitkirk Auction Mart .....	..	..	..	..	..	..	..	40	40
72. Poultry Dealers .....	..	..	..	..	..	..	..	129	129
73. Poultry Market and Shows .....	..	..	..	..	..	..	..	..	..
TRADES AND BUSINESSES.									
74. Factories with mechanical power .....	..	..	..	..	..	1,704	..	..	1,704
75. Factories without mechanical power .....	..	..	..	..	..	11	..	..	11
76. Other premises, constructional works, etc. ....	..	..	..	..	..	50	..	..	50
77. Offices .....	..	..	..	..	..	1	..	..	1
78. Workplaces	2	2	5	4	296	..	..	..	30
79. Hairdressers	22	5	16	43	..	..	..	..	..
80. Shops .....	..	1	1	20	338	..	..	..	30
81. Outworkers .....	..	1	..	..	..	..	..	..	..
82. Offensive trades	10	9	3	7	10	..	..	..	..
83. Pet Shops .....	..	4	10	18	8	..	..	..	..
84. Visits for enquiry	23	15	328	1	852	..	..	..	1,221
SMOKE CONTROL—GENERAL.									
85. Smoke observations	34	10	36	71	153	..	..	..	30
86. Visits for grit emissions .....	..	..	..	..	3	..	..	..	..
87. Inspection of boiler plant	3	..	1	2	101	..	..	..	101
88. Visits for prior approval of furnaces .....	..	..	..	..	2	..	..	..	..
89. Visits for height of chimneys .....	..	..	..	..	71	..	..	..	..
90. Atmospheric pollution records .....	..	..	..	..	1,595	..	..	..	1,595
91. Visits for enquiry	16	..	17	3	59	..	..	..	..
SMOKE CONTROL AREAS									
92. Preliminary enquiries .....	..	..	..	..	716	..	..	..	7
93. Inspection of approved appliances installed .....	..	..	..	..	218	..	..	..	218
94. Smoke observations	1,659	467	..	..	..	..	..	..	2,111
95. Visits for enquiry	56	1	..	..	2,023	..	..	..	2,023
GENERAL.									
96. Rodent infestations .....	..	..	..	..	..	..	..	..	..
97. Visits re Pigeons .....	..	3	..	..	..	..	..	..	..
98. Farms and agricultural units .....	..	4	..	4	..	..	..	..	..
99. Stables .....	..	1	..	1	..	..	..	..	..
100. Pig-styes	12	44	44	52	..	..	..	..	..
101. Poultry and other animals .....	..	15	3	8	..	..	..	..	..
102. Shellfish .....	..	..	..	..	..	..	..	..	..
103. Infestations of food .....	..	..	..	..	..	..	..	..	..
104. Condemnation of food .....	..	..	..	..	..	..	..	..	..
105. Water supply	131	101	130	118	4	..	..	..	41
106. Infirm and sick persons .....	..	4	..	3	..	..	..	..	..
107. Watercourses and ditches .....	..	5	16	32	9	3	..	..	..
108. Culverts .....	..	1	..	..	3	..	..	..	..
109. Noise nuisances .....	..	4	3	21	5	23	..	..	..
110. Other nuisances .....	..	10	6	15	6	20	..	..	..
111. Public conveniences .....	..	23	58	10	163	..	..	..	23
112. Visits for enquiry	447	523	157	434	28	895	..	..	2,402
113. No access visits	1,269	893	812	749	725	805	(a)	2	5,020
114. Other visits (not included in above)	112	76	44	16	11	35	..	..	2

* Includes 8,107 for sewer baiting.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1961.—contd.

ANALYSIS OF WORK DONE		North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
REPAIRS AND IMPROVEMENTS.										
Roofs, valley gutters, flashings, etc.	164	177	86	141	1					569
Chimney stacks, flues, pots, etc.	17	21	6	32						76
Eaves spouts	72	117	23	70	3					285
Fallpipes	90	62	27	58	2					239
Walls, brickwork, pointing	45	82	9	60						196
Damp-proof courses provided	2	..	..	..						2
Dampness otherwise remedied	9	46	5	7						67
Wallplaster	19	37	9	26						91
Ceilings	8	26	7	9						50
Floors	16	22	4	20						62
Windows, frames, cords, etc.	27	82	11	46						163
Doors, door-frames	10	31	1	6						48
Ovens, fire-ranges, grates, etc.	16	19	3	9						47
Washing boilers, setpots, etc.	..	1	..	..						1
Sinks, lavatory basins, etc.	14	11	5	13						43
Waste pipes	22	29	13	26						90
Water supply	15	10	3	14						42
Food stores	1	..	..	..						1
Pavings, yards and passages	10	23	4	16						53
Repairs to water closets	69	129	24	60						282
New water closets provided	10	5	3	5						23
New pail closets provided	..	2	..	..						2
Trough closets abolished	..	..	..	..						..
Privy closets abolished	..	..	..	..						4
Pail closets abolished	..	..	..	..						..
Dustbins provided	5	5	..	2						12
Ashpits repaired	..	1	..	..						1
Sunken ashpits abolished	..	..	..	..						..
Other ashpits abolished	..	3	2	..						5
Other repairs to premises	16	21	3	15						55
Verminous premises disinfested	16	2	1	..						19
Dirty premises cleansed	23	6	4	2						35
Closets cleansed	5	3	2	3						13
Underground dwellings made fit or closed	..	..	..	..						..
Improvements to common lodging-houses	..	..	..	..						..
Improvements to houses let in lodgings	..	..	..	..						..
Improvements to canal boats	..	..	..	..						..
Improvements to caravan sites	..	..	..	..						..
FOOD PREMISES.										
Walls, ceilings, floors, etc., improved	15	18	1	21	5					60
Walls, ceilings, floors, etc., cleansed	13	21	19	133	7					193
Ventilation provided or improved	9	20	12	27	8					76
Articles, apparatus, clothing cleansed	6	1	3	118	1					129
Personal washing facilities provided	8	3	1	32	3					47
Other washing facilities provided	7	4	6	8	2					27
Hot water supply provided	10	2	5	21	3					41
Accommodation for clothing provided	2	..	3	6	4					15
First-Aid equipment provided	5	6	..	7	5					23
Other improvements	9	18	10	11	8					56
TRADES AND BUSINESSES.										
FACTORIES.										
Rooms cleansed	..	..	..	..	3					3
Rooms ventilated	..	..	..	..	4					4
Reasonable temperature secured	..	..	..	..	1					1
Overcrowding abated	..	..	..	..	..					..
Floors drained	..	..	..	..	..					..
Insufficient conveniences remedied	..	..	..	..	23					23
Unsuitable/defective conveniences remedied	..	..	..	..	330					330
Conveniences made separate for sexes	..	..	..	..	3					3
Other offences remedied	..	..	..	..	..					..
Absence of abstract noted	..	..	..	..	..					..
WORKPLACES.										
Rooms ventilated	..	..	..	..	..					..
Overcrowding abated	..	..	..	..	..					..
Rooms cleansed	..	..	..	..	..					..
Sufficient conveniences provided	..	..	..	..	..					..
Other defects remedied	..	..	..	..	..					..

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1961.—contd.

ANALYSIS OF WORK DONE	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses	(b) Rodent	Food and Dairies	Total
TRADES AND BUSINESSES (Continued).										
SHOPS										
178. Ventilated
179. Reasonable temperature secured
180. Sufficient conveniences provided
181. Lighting provided
182. Washing facilities provided
183. Meals facilities provided
184. Other defects remedied	5	..	..	..
HAIRDRESSERS.										
185. Byelaw offences remedied
OFFENSIVE TRADES.										
186. Nuisances abated	1	..	..	..	..
187. Improvements secured
PET SHOPS.										
188. Improvements secured
SMOKE CONTROL.										
189. Furnaces newly provided
190. Furnaces altered, repaired or renewed
191. Chimneys newly erected	1	..	..	..
192. Chimneys extended or improved	2	..	..	..
193. Furnaces provided with mechanical stoking
GENERAL.										
194. Rodents caught, killed or poisoned	(b) *2,692	..	2,692
195. Premises cleared of rodents	(b) 536	..	536
196. Premises rendered rodent-proof	(b) 48	..	48
197. Pigeons killed	(b) 1,206	..	1,206
198. Watercourses cleansed	1	..	..	..	..	..	..	..
199. Culverts cleansed or maintained
200. Poultry-house improvements
201. Pig-stye improvements	1	..	..	..	..	..	..	..
202. Offensive matter removed	5	2	..	4	1	..	..	..	1
203. Manure removed	1	..	..	..	..	..	..	..	..
204. Manure-steads built or repaired	1	..	..	..	..	..	..	..
205. Noise nuisance abated	1	..	4	..	..	..
206. Other nuisances abated	1	14	1	..	5	..	..	2
DRAINAGE.										
207. Drains repaired or relaid	39	53	31	45	18	..	..	..	..
208. Drains cleansed	418	196	786	306	61	..	..	..	1,761
209. Private sewers repaired or relaid	3	7	3	8	1	..	..	..	2
210. Private sewers cleansed	50	61	61	57	2	..	..	..	13
211. Public sewers maintained	19	23	14	12	..	..	..	..	6
212. Public sewers cleansed	223	121	192	243	13	..	..	..	79
213. Ball and water tests	12	14	43	37	14	..	..	..	12
214. Other tests	480	156	1,819	402	53	..	..	..	2,916
215. Gullies renewed or provided	8	6	3	3	..	..	..	..	2
216. Soilpipes and ventilating pipes	14	19	3	12	..	..	..	..	4
217. Inspection Chambers provided or maintained	3	2	5	14	..	..	..	..	2
218. Cesspools repaired or provided	1	..	..	1	..	..	..	..
219. Cesspools emptied	1	..	..	..	..	..	..	..
220. Cesspools abolished	2	..	..	..	..	..	..	..	..
SAMPLES TAKEN.										
By Food and Drugs Inspectors:—										
221. Milk—Chemical analysis
222. Milk—Bacteriological examination
223. Milk—Biological examination
224. Food and Drugs—Chemical analysis
225. Food and Drugs—										
Bacteriological examination
226. Ice-Cream—Chemical analysis
227. Ice-Cream—Bacteriological examination
228. Fertilisers and Feeding stuffs—										
Chemical analysis
229. Rag Flock, etc.—Chemical analysis
By Meat and Other Foods Inspectors:—										
230. Food—Chemical analysis
231. Food—Bacteriological examination
232. Shellfish—Bacteriological examination

* Includes 70 rabbits.

PREVENTION OF ATMOSPHERIC POLLUTION

BY

J. H. WYATT

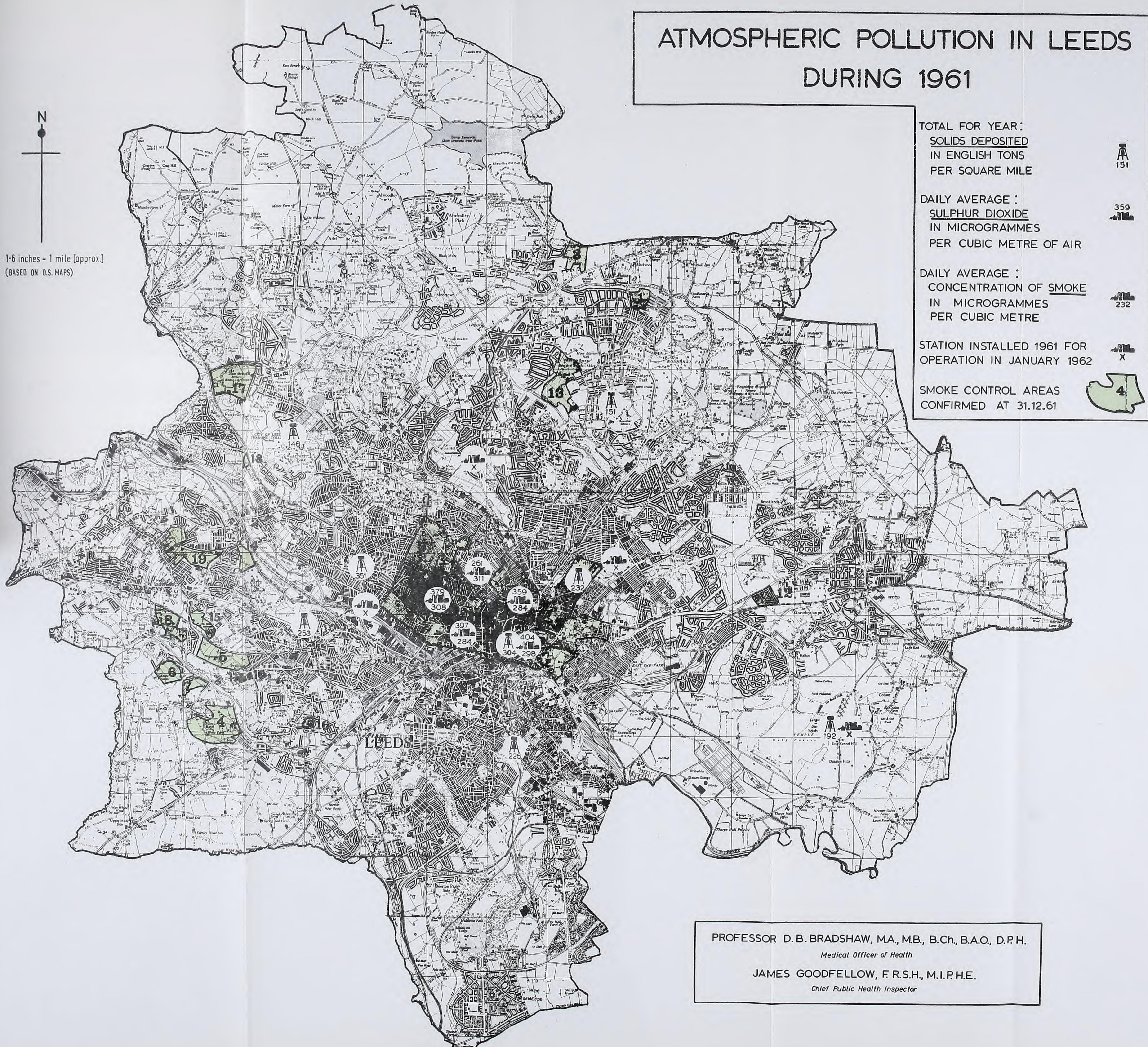
Deputy Chief Public Health Inspector

Recordings of the degree of atmospheric pollution in the city continued throughout 1961 with the aid of instruments situated at stations in various parts of the city. The approximate sites of these stations are marked on the map opposite page 226 and some indication of the degree of pollution recorded is shown. Eight of the stations are equipped with standard deposit gauges for the measurement of solid deposit and with lead dioxide instruments for the measurement of sulphur pollution of the air, these are at Hunslet, Headingley, Temple Newsam, Market Buildings, Armley Park, St. James's Hospital, Burley Park and Roundhay Hall. They are sited, as far as possible, so as to cover the whole area of the city and to give a picture of the level of pollution in the various districts. Some of these stations have been established for more than 30 years, but recent investigations which have been undertaken into the efficiency of the various atmospheric pollution recording instruments, and in particular of the lead dioxide instrument for sulphur pollution, have raised doubts as to their usefulness. The Fuel Research Station of the Department of Scientific and Industrial Research now says that the lead dioxide instrument merely registers the rate of reaction to the sulphur dioxide in the air with a lead dioxide surface. The results are dependent upon many different factors, such as the temperature, the wind speed, the relative humidity and the like, and it is now considered that these instruments are unreliable in detecting trends in pollution. It has, therefore, been decided to abandon the use of the lead dioxide instruments and this year (1961) is the last year in which these records will be produced. The instruments have been closed down as from the 31st December, 1961. With regard to the standard deposit gauges also, the Department of Scientific and Industrial Research have certain reservations as to their usefulness, but they suggest that the records which are produced from these instruments have special use for the local authority in whose area they are produced. The Leeds Health Committee has decided to continue with the 8 standard deposit gauges which exist at the moment.

In addition to the eight stations above-mentioned there are smoke filter and volumetric sulphur dioxide measuring instruments at 5 other sites in the city; these are at (i) the Public Health Department Annexe, 12 Market Buildings, Leeds 1, (ii) the Department of Preventive Medicine and Public Health, 32 Hyde Terrace, Leeds 2, (iii) the Day Nursery, Blackman Lane, Leeds 2, (iv) the Y.W.C.A. Hostel, Lovell Street, Leeds 7, and (v) the Maternity and Child Welfare Clinic, Park Square, Leeds 1. The equipment at Market Buildings has been in operation since October, 1950, and the other four were installed in August, 1957, at the request of the Fuel Research Station, in order to record the effect of making the City of Leeds (Central Area) Smoke Control Order which will become operative on the 1st July, 1962. It is hoped that the records which have been obtained in the past 5 years will, when compared with records taken subsequent to the coming into operation of the Order, show a reduction in the level of atmospheric pollution in this particular area.

In April, 1961, the Ministry of Housing and Local Government issued Circular No. 12/61, on the subject of "Air Pollution—Measurement and Research". This circular invited local authorities who were not at the moment undertaking investigations into the problems of air pollution to begin atmospheric pollution recordings. The circular also discussed the existing arrangements for atmospheric pollution recording throughout the country. Its conclusions were that the existing scheme of co-operative measurements was not sufficiently comprehensive to provide an accurate picture of the distribution of air pollution in different types of area throughout the country. It went on to say that a working party had drawn up a plan for the redistribution of some of the existing measurement instruments and for the siting of new instruments in order to remedy this defect, and also to provide a yardstick by which measurements could be compared with the average degrees of pollution by smoke and sulphur dioxide in various types of area throughout the country. It is hoped that the proposals will result in a national survey of air pollution by smoke and sulphur dioxide. Under the proposals some authorities are being invited either to start taking measurements or to take measurements at new sites within their area. The Ministry has asked Leeds to co-operate in this national survey by installing 4 additional volumetric and sulphur dioxide instruments. Permission for the installation of these 4 instruments was given at the

ATMOSPHERIC POLLUTION IN LEEDS DURING 1961



July meeting of the Health Committee and these stations were installed towards the end of 1961. It was intended they should commence operations from the 1st January, 1962.

The Department also has a spare deposit gauge which is used for experimental purposes. This is still installed on the roof of a foundry in the city to measure solid deposits emitted from the cupolas at the foundry.

The examination of the material collected by deposit gauges and the lead dioxide instruments is done monthly, and the tests of the smoke filter and volumetric sulphur dioxide instruments daily. The gauges are attended and the filters for smoke and the absorbent fluids for sulphur emissions changed by pupils in the Factories and Smoke Division of the Department. The testing is done by Mr. R. A. Dalley, the City Analyst, and his staff. I must, in this connection, again express my appreciation of the help which is afforded to us in this respect by Mr. Dalley.

The stations I have mentioned are provided and operated by the Health Committee. In addition to these the Central Electricity Generating Board has 8 stations sited so as to monitor emissions from Skelton Grange Power Station, 4 of these have deposit gauges and lead dioxide instruments, the other 4 lead dioxide instruments only. 4 of the stations are sited outside the Leeds boundary, but the results from those situated within the boundary are used by the Department in assessing pollution level in the area in the city adjoining the Power Station.

Standard Deposit Gauges.—The table on page 243 shows the monthly deposits in English tons per square mile for the years 1960 and 1961.

The highest monthly average deposit was again recorded at Burley Park with a monthly average of 29.27 tons per square mile over the whole year. The station with the lowest monthly average was Headingley, which in 1961 recorded a monthly average of 12.34 tons per square mile, as compared with last year's lowest at Roundhay, with an average of 10.75 tons per square mile.

The experimental standard deposit gauge, which is at present on the roof of a foundry, again recorded extremely high local deposits, but with a slight improvement on 1960. The average for the year 1961 was 61.38 tons per square mile, as against 67.24 tons per square mile for 1960. This may be due to the additional grit arresting plant fitted in the past year.

The table on page 242 sets out the solid deposits recorded by the standard deposit gauges in the city for the years 1931 to 1961 inclusive.

Estimation of Atmospheric Pollution by the Lead Dioxide Method.—The table on page 244 sets out the results of the examination of these instruments during the years 1960 and 1961. The station showing the highest monthly average of atmospheric sulphur pollution in 1961 was again Market Buildings with 3.98 milligrammes of sulphur trioxide per 100 square centimetres as compared with an average of 3.70 milligrammes in 1960.

The station showing the lowest monthly average was again Roundhay with 1.64 milligrammes of sulphur trioxide per 100 square centimetres as compared with 1.50 milligrammes for 1960.

The monthly average of SO_3 in milligrammes per day per 100 square centimetres for all stations in the city is illustrated graphically on page 245 and a direct comparison is given between the average for 1960 and 1961. These graphs again show clearly the increase in sulphur emissions during the months when domestic fires are commonly in use.

In my opening remarks I referred to the doubts which now exist as to the value of the lead dioxide instrument. As previously stated, these instruments have now been dismantled and as from the 1st January, 1962, no further records of sulphur pollution will be produced by this means.

Concentration of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.—Records from the 5 instruments operated by the Department are set out in the tables on pages 240 and 241.

It should be noted that in previous years the results for smoke filter apparatus have been recorded as concentrations of smoke in milligrammes per 100 cubic metres, and for the sulphur dioxide volumetric apparatus as concentrations of sulphur dioxide in parts per 100 million of air. As from April, 1961, a new method of calculation was introduced by the Department of Scientific and Industrial Research which referred to concentrations of smoke and sulphur dioxide in microgrammes per cubic metre of air. The results in the tables now printed are given according to the new formula, and the readings for the months of January, February and March, 1961, have been suitably adjusted.

Clean Air Act, 1956.—*Dark Smoke Emissions from Chimneys.*—The provisions with regard to the emission of dark and black smoke from chimneys are contained in Sections 1 and 2 of the Clean Air Act, 1956, and in two sets of Regulations made by the Minister under the provisions of Section 1. The Regulations are The Dark Smoke (Permitted Periods) Regulations, 1958, dealing with emissions from chimneys of buildings and the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, dealing with emissions from chimneys of vessels.

These Regulations provide standards which when contravened set up a presumption that there has been an offence against the Clean Air Act.

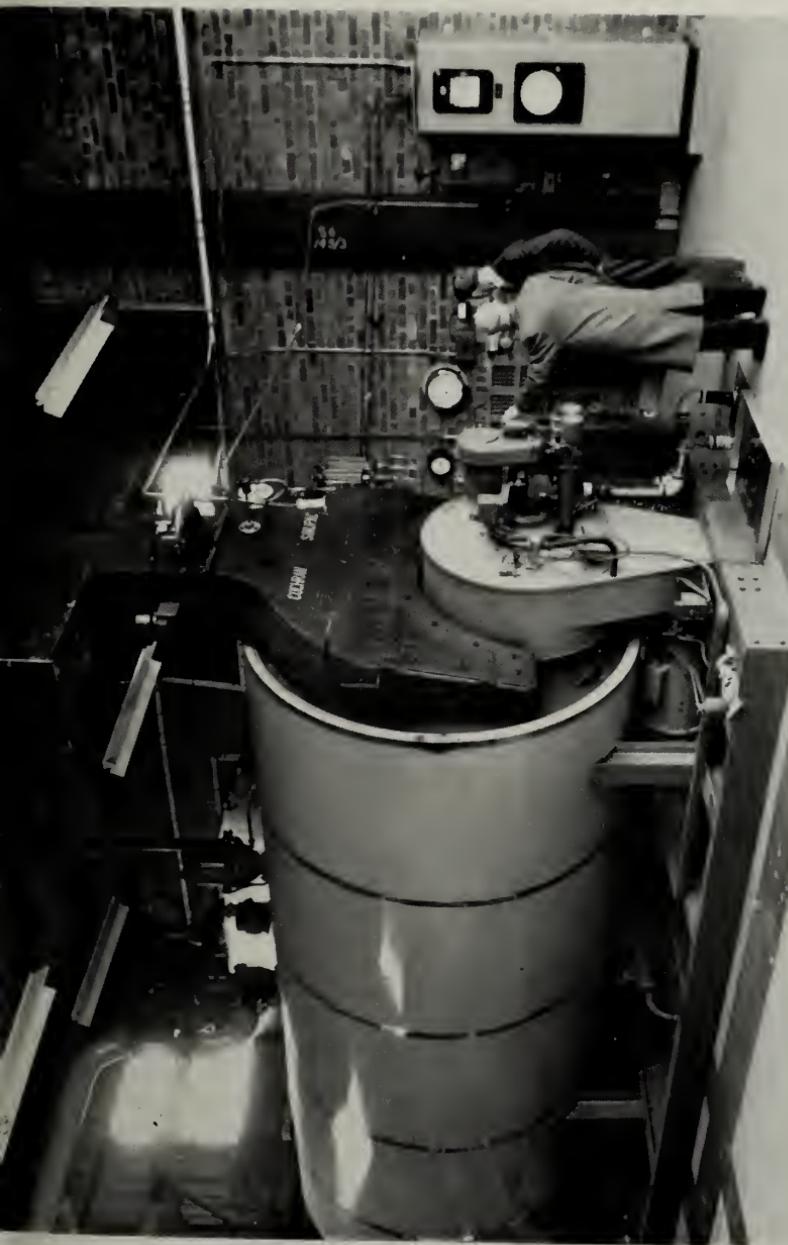
During 1961, 304 smoke observations were taken and 36 Notices were served for contraventions of the Dark Smoke (Permitted Periods) Regulations. In addition to the observations 107 visits were paid to boiler plant and other fuel burning installations in order to give advice on methods to be adopted to comply with the Regulations.

During the year two prosecutions were undertaken for contravention of Section 1 of the Act and in each case the firm concerned was fined £20. Several other firms were warned that the performance of their chimneys was unsatisfactory, and that the Corporation would have to consider legal action if conditions did not improve.

Section 2 of the Act allows for the temporary exemption of buildings which it has been found impracticable up to the present time to alter or equip so as to enable the occupiers to conform with the provisions of Section 1 of the Act with regard to smoke emissions. This power of exemption remains in force for 7 years from the date of the passing of the Clean Air Act, that is, from the 5th July, 1956. The time when these exemptions can be granted is, therefore, now limited, and in fact on the 29th August, 1961, the Minister of Housing and Local Government issued Circular No. 42/61 reminding Local Authorities of this and asking them to ascertain to what extent buildings and furnaces in their area have not yet been altered or equipped to meet the provisions of the Clean Air Act, and also suggesting that where necessary Local Authorities remind those concerned that time is beginning to run out. Following this Circular many visits were paid by inspectors to the older installations in the city, and in particular to hand fired plant, to remind people of the imminent lapse of this power of exemption. In 1961 one application only was received for such an exemption. It concerned two mains frequency electric induction furnaces used by a large engineering firm in the city for the melting of steel swarf. An exemption was given for a period of 12 months to enable the firm to make investigations into the best method of melting this material which is soaked in cutting oil and which produces dense volumes of black smoke during the melting process. These investigations are still proceeding.

The Installation of New Furnaces and Prior Approval of Furnaces. Section 3 of the Clean Air Act requires any person who installs a new furnace to notify the Local Authority. It requires that all new furnaces must be capable of operating continuously without emitting smoke while burning fuel of the type for which they were designed. There is also provision in the Section for the prior approval of new furnaces by the local authority.

In 1961, 57 notifications of the installation of new furnaces were received. There were also 5 applications for prior approval of industrial plant and all these were approved subject to various conditions. An example of work in connection with prior approval is illustrated in the photograph opposite. This shows work in progress in the installation of a modern boiler and the construction of a new chimney at a woollen mill in the city.



PRIOR APPROVAL OF FURNACES

Final inspection of the first of a pair of economic boilers to which prior approval has been given. This boiler is oil fired with fully automatic control and is fitted with smoke alarm and recording equipment. The flue gases discharge to a new brick chimney built as required by the Public Health Inspector to 100 ft. from ground level.

Control of Grit and Dust from Furnaces.—Sections 5 to 9 of the Clean Air Act deal with grit and dust emission from furnaces. They provide in particular that the occupier of any building in which a new furnace is installed and which burns solid fuel or solid waste must use any practicable means there may be of minimising emissions of grit and dust. It is also provided that if a furnace burns pulverised fuel or solid fuel or solid waste at a rate in excess of one ton per hour, it must be fitted with apparatus for arresting grit and dust which has been approved by the Local Authority.

Complaints of Grit and Dust.—Complaints which are received about grit and dust emissions often refer to emissions from cupolas used for melting iron. Two serious complaints of this type were received during the year and pressure was brought to bear upon the two firms concerned. In this connection the experimental deposit gauge, which is installed on the roof of one of the foundries referred to in these complaints, produced startling evidence of the very serious nuisance from the cupolas. All the cupolas except one at this foundry have now been fitted with wet washing equipment, and there has been a very obvious improvement in conditions in the vicinity of the plant. In the other complaint, wet washers were also fitted to two cupolas to replace two primitive dry arrestors. These again have reduced the grit fall in the area very considerably. During the year some 12 grit deposit records were taken in connection with these complaints.

Heights of Chimneys.—Section 10 of the Act enables the Local Authority to control heights of chimneys from certain types of new buildings, and in Leeds this is supplemented by the provisions of Section 120 of the Leeds Corporation Act, 1956. This latter Section extends the control to all types of new buildings. The power of rejection is linked with the submission of new building plans and the control is in fact exercised by the Town Planning and Improvements Committee rejecting unsuitable plans after receiving advice from the Health Department. The chief weakness of these powers is that they do not deal with existing chimneys which are often the cause of considerable trouble when they are too short.

During 1961, 50 plans of new chimneys were examined and commented upon. In most cases the heights of chimneys shown on the plans had already been settled by negotiation between public health inspectors and the architects concerned, but in 15 instances no discussion had taken place and an extension of the chimneys indicated were required. In no case was it necessary for plans to be rejected although several plans were deferred by the City Engineer until agreement had been reached between the architect and the Health Department. The increases in height obtained by this procedure ranged from 4 feet to as much as 30 feet.

In considering heights for new chimneys, consideration is given to the four points set out in the relevant section of the two Acts concerned.

These are:—

- (a) the purpose of the chimney
- (b) the position and description of buildings nearby
- (c) the levels of the neighbouring ground, and
- (d) any other matters requiring consideration in the circumstances.

Under item (d) particular attention is made to the probable emission of sulphur fumes from the plant in question.

The volume of sulphurous gases emitted over a period from a chimney of a large plant burning either solid or liquid fuels can be very considerable. In assessing chimney heights, therefore, particular attention is paid to the ground level concentration of sulphur gases which might be produced by emissions from the chimney when the normal fuel is being burned at the maximum continuous rating of the furnace, and the heights which are then calculated by use of formulæ are those which would be expected not to give an unreasonably high concentration of sulphur dioxide at ground level. We have in Leeds taken the view that a reasonable maximum limit of sulphur dioxide from any point source at ground level is 0.3 parts per million in air.



GRIT NUISANCE FROM FOUNDRY

Experimental grit and spark arrestor for two large cupolas fitted with water spray arrangements. To be replaced by new proprietary type wet arrestors with pH control for washing liquor.



ELECTRODE BOILER WITH NO CHIMNEY

This electrode boiler, which needs no chimney, has been installed in a new factory because of the high cost of providing a chimney stack for a boiler fired with solid or liquid fuel. An extremely tall stack would have been necessary in view of the terrain and of the proximity of a railway embankment and high blocks of flats.

The subject of chimney heights is extremely complex, and often produces prolonged discussion between the Architects and Engineers on the one side and the public health inspector on the other. I am, however, happy to report that all these difficulties have been satisfactorily resolved by negotiations during the year. One particular example of collaboration between Architects and this Department was the installation of an electrode boiler in a position where the chimney height which would have been required for a solid fuel boiler would have been excessive. This electrode boiler, which is illustrated opposite is one of the largest in the north of England, and is operating satisfactorily.

Smoke Control Areas.—Section 11 of the Clean Air Act, 1956, gives local authorities powers to establish Smoke Control Areas within their districts. The process of making Orders defining these areas is a continuous one and details of the Orders made up to the end of 1961 are set out in the table printed on page 239.

Twenty-four areas had been considered and approved in principle by the Health Committee for the making of Smoke Control Orders up to the end of 1961. Five of these which comprise certain Corporation owned estates have been deferred for the time being because of difficulties which have arisen about the type of fireplaces installed in certain of the houses on the estates. They are not included in the table previously mentioned. The table sets out the position as regards the confirmation of each area and gives the date on which the Orders are to come into operation. It will be noted that in 1961 fourteen areas were confirmed by the Minister, but the operative date in each case is to be the 1st July, 1962. Two areas which were confirmed by the Minister in 1960, that is No. 4 (Cow Close) and No. 5 (Armley Heights) areas, became operative on the 1st June, 1961. The smoke control areas which had been confirmed up to the end of 1961 are delineated on the map facing page 226.

Use of Sticks and Paper for Ignition.—A Circular issued in 1960 by the Minister of Housing and Local Government referred to the use of sticks and paper in Smoke Control Areas for ignition of authorised fuels. The Circular said that the Minister was of the opinion that it would be unreasonable to insist upon the provision of

gas supplies for lighting fires in houses which have no town's gas but which stand in Smoke Control Areas, and he suggested that exemptions should be given to allow for the use of sticks and paper in such cases.

In Leeds there are many houses in existing and proposed Smoke Control Areas which have no town's gas supplies and exemptions to allow for the use of sticks and paper are being inserted in all Smoke Control Orders where they are relevant.

However, in June, 1961, the Minister issued a further Circular No. 31/61 which referred to works of adaptation eligible for grant. It made the point that in the original memorandum on Smoke Control Areas, necessary incidental works of adaptation might include the provision of gas ignition to open fireplaces and that such work would rank for grant under the provisions of Section 12 of the Act. The Circular went on to say that at the time of the issue of the memorandum methods of electrical ignition had not been developed. They now have been, and accordingly the relevant paragraph in the memorandum about Smoke Control Areas may now be read as including a reference to electrical means of igniting coke and other smokeless solid fuel. The Circular says that reasonable freedom of choice between gas and electrical ignition should now be given to owners and occupiers providing that in any particular case the total cost of the alternative is broadly comparable. Nevertheless, the Minister still says that he does not at present wish to revise the guidance given to Local Authorities in the Circular 28/60 about the use of sticks and paper for lighting fires in Smoke Control Areas.

Central Smoke Control Area.—The City of Leeds No. 2 (Central Area) Smoke Control Order, 1959, comes into operation on the 1st July, 1962. The works of adaptation which are necessary in fireplaces in this area have proceeded during the year, but at the end of the year some thousands of fireplaces still required works of adaptation.

Cow Close and Armley Heights Smoke Control Areas.—The City of Leeds No. 4 (Cow Close) Smoke Control Order, 1960, and the City of Leeds No. 5 (Armley Heights) Smoke Control Order, 1960, became operative on the 1st June, 1961. Observations which have been taken in these areas by inspectors seem to show that the terms

of the Order are being complied with by the occupiers of the houses on these estates. All occupiers were in fact circularised by the Director of Housing to the effect that the Order became operative on the date mentioned and warning them that they must use only authorised fuels.

Publicity.—In December, 1961, the Solid Smokeless Fuels Federation very kindly provided a mobile exhibition unit to demonstrate the efficient burning of authorised fuels in approved grates. This exhibit was stationed for short periods in the No. 3 (Alwoodley) Smoke Control Area and the No. 4 (Cow Close) and No. 5 (Armley Heights) Smoke Control Areas. Despite appalling weather this exhibit aroused considerable interest in the areas concerned, and the attendants dealt with numerous enquiries as to the efficient burning of authorised fuels in the existing fireplaces.

In addition to the above a special display was mounted by the Solid Smokeless Fuels Federation in the Market Buildings offices during the months of June and July.

The Abatement of Smoke Nuisances.—Section 16 of the Clean Air Act provides that smoke other than smoke from the chimneys of private dwellings or dark smoke emitted from the chimneys of buildings, shall, if it is a nuisance to the inhabitants of the neighbourhood, be a statutory nuisance in accordance with the provisions of Part III of the Public Health Act, 1936.

The only complaints which have been received during the year have referred to the burning of refuse on open land and in particular to the burning of trade refuse from manufacturing processes. These have been dealt with in each case by verbal representation and no notices have been served. In each case the firm in question has been pressed either to make alternative arrangements for the disposal of their trade refuse or to provide a properly constructed incinerator with a chimney of a suitable height and sited in a position where the least offence would be caused.

Alkali, Etc. Works.—H.M. Inspectors of Alkali, Etc. Works is responsible for the control of smoke and fume emissions from chimneys which are used in connection with processes carried on at

premises occupied by firms which are registered under the provisions of the Alkali Etc., Works Regulations Act, 1906. There are twenty-three such firms in Leeds. H.M. Inspector is also responsible for the supervision of emissions from certain processes which are listed in the Alkali, Etc., Works Orders, 1958 and 1961.

A continuing nuisance from premises which are dealt with by the Alkali Inspector is of fume from a lead recovery and refining plant. This firm has installed certain arresting equipment, but this has not proved to be the complete answer to the nuisance in the vicinity of the works. Further investigations into this are proceeding.

In the report for 1960, reference was made to a nuisance from two large hot blast cupolas at a foundry. The Alkali Inspector required these to be fitted with cyclone type arrestors and the effluent gases from the arrestors to be discharged to a chimney stack 120 ft. in height. This has still not yet been carried out because of limitations of space available, and it is possible that some alternative and probably more efficient method of dealing with discharges from these cupolas will have to be installed. Complaints are still being received about this nuisance from firms in the vicinity, and the Alkali Inspector is being pressed to take steps to abate the nuisance.

A further nuisance which has created considerable trouble during the year concerns grit emission from the coke grading plants of one of the large gas works in the City. In response to representations from this Department, the Alkali Inspector has now required the Gas Board to install suitable screening to prevent this serious nuisance and this is being provided.

Colliery Spoilbanks.—One complaint was received during 1961 about nuisance from a burning spoilbank which has been disused as such for more than 30 years. In this instance the spoilbank had been used as a playground by local children who had from time to time lit bonfires on the surface, and it would seem that this was the cause of the spoilbank taking fire. Efforts are being made to control this fire, principally by ploughing the surface and digging out burning material.

DOMESTIC SMOKE

issuing from dwelling houses (not yet in a Smoke Control Area) at Harehills, Leeds, 9. Photographed on a day in April at 4.30 P.m.



Control of Smoke from Railway Engines.—The only part of the Clean Air Act which applies to railway engines is Section 1 dealing with dark smoke emissions. There have been no complaints about smoke from railway engines during the year.

Control of Smoke from Vessels.—No complaints have been received during the year about smoke emissions from tugs or canal boats on the rivers and canals.

Exemption for the purposes of Investigation and Research.—Section 21 of the Clean Air Act enables the Local Authority to give exemption to certain chimneys and furnaces from the provisions of the Clean Air Act while they are being used for the purpose of investigation and research into the problem of air pollution.

Two applications for such exemption were received and granted during the year. The first was a continuation of a previous exemption of the large chimney at the boiler-house of the University of Leeds, where one large coal fired boiler which is connected to the chimney is installed with the object of providing research into problems of combustion and air pollution. This is the third time that this exemption has been renewed, but as yet this boiler has not been used for research purposes.

The second exemption was given to a large foundry in the city while carrying out research into the efficient melting of swarf and turnings in a mains frequency induction furnace. This process produces volumes of black smoke when the turnings and swarf are covered with cutting oil from the lathes and continuing investigations have still not produced an answer to the nuisance caused.

Building Byelaws.—The City Council's Building Byelaws contain a provision that in new buildings the arrangements for cooking and heating should be such as are capable of burning either gas, electricity, coke or anthracite. This Byelaw is proving somewhat difficult to enforce because of the variations in types of appliances which are on the market at the present time. The enforcement of the Byelaw is, of course, in the hands of the City Engineer.

General.—The work of the public health inspectors on smoke abatement in 1961 can be summarised as follows:—

General:

Smoke observations	304
Visits for grit emissions	3
Inspection of boiler plant	107
Visits for prior approval of furnaces	2
Visits for height of chimneys	71
Atmospheric pollution records	1,595
Visits for enquiry	95

Smoke Control Areas:

Preliminary enquiries	716
Inspection of approved appliances installed	218
Smoke observations	2,126
Visits for enquiry	2,080

CITY OF LEEDS — SMOKE CONTROL AREAS

NAME OF AREA	CLASSES OF BUILDINGS				Acreage of Area	Date approved in principle by Sub-Health (S.F. & D.) Committee	Date approved in principle by Housing Committee	Date Order Made	Date Order Confirmed	Date Order in Operation
	Domestic	Commercial	Industrial	Other						
No. 1 (Roman Avenue)	162	—	—	—	162	20	20-12-57	16-1-58	16-5-58	31-3-59
No. 2 (Central Area)	6,418	3,771	795	1,167	12,151	1,168	21-6-57	—	20-3-59	29-7-60
No. 3 (Alwoodley) ..	144	—	—	—	144	33	16-1-59	—	19-6-59	11-11-59
No. 4 (Cow Close) ..	598	5	1	3	607	68	12-2-60	17-3-60	15-7-60	23-12-60
No. 5 (Armley Heights) ..	640	8	1	2	651	63	12-2-60	17-3-60	15-7-60	23-12-60
No. 6 (Tong Road) ..	256	4	1	—	261	22	11-3-60	21-4-60	5-7-61	30-10-61
No. 7 (Stonebridge Lane) ..	110	—	1	—	111	10	11-3-60	21-4-60	5-7-61	30-10-61
No. 8 (Gamble Hill) ..	246	—	—	2	248	38	11-3-60	21-4-60	5-7-61	30-10-61
No. 9 (Meynell Street) ..	180	—	—	—	180	4	8-4-60	19-5-60	5-7-61	30-10-61
No. 10 (Silver Royd "A") ..	24	—	—	—	24	1	8-4-60	19-5-60	5-7-61	30-10-61
No. 11 Silver Royd "B" ..	46	—	—	—	46	3	8-4-60	19-5-60	5-7-61	30-10-61
No. 12 (Sutton) ..	220	1	1	2	224	20	8-4-60	—	5-7-61	30-10-61
No. 13 (Brackenwood) ..	871	7	—	—	878	77	13-5-60	16-6-60	5-7-61	30-10-61
No. 14 (Armley Ridge Road)	62	1	—	1	64	21	13-5-60	16-6-60	5-7-61	30-10-61
No. 15 (Poplar) ..	154	—	—	—	154	23	13-5-60	16-6-60	5-7-61	30-10-61
No. 16 (Greenside) ..	247	—	—	69	316	7	13-5-60	16-6-60	5-7-61	30-10-61
No. 17 (Moor Grange) ..	834	5	1	1	841	54	13-1-61	16-2-61	5-7-61	30-10-61
No. 18 (Kepstom) ..	50	—	—	6	56	4	13-1-61	16-2-61	5-7-61	30-10-61
No. 19 (Raynville Road) ..	670	—	—	670	71	—	13-1-61	16-2-61	5-7-61	30-10-61

SMOKE FILTER APPARATUS

Concentration of Smoke in Microgrammes per cubic metre

1961	DAILY AVERAGE				HIGHEST DAILY AVERAGE					
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.
January ..	450	500	470	440	420	1,090	1,190	1,180	1,050	1,080
February ..	390	410	390	370	380	1,060	960	890	930	999
March ..	370	350	350	360	370	1,140	1,030	1,050	1,050	1,070
April ..	260	300	270	250	240	540	610	590	640	540
May ..	122	134	136	122	112	212	215	216	206	190
June ..	133	99	122	111	100	249	212	242	213	184
July ..	105	83	133	91	83	224	186	277	185	158
August ..	121	90	105	99	94	228	153	191	170	158
September	190	152	185	158	154	341	284	377	298	278
October ..	343	354	380	331	313	1,103	895	1,092	1,011	929
November ..	493	503	496	414	447	1,328	1,332	1,468	1,064	1,340
December ..	603	751	661	665	700	1,480	1,712	1,784	1,636	1,596

SULPHUR DIOXIDE VOLUMETRIC APPARATUS

Concentration of Sulphur Dioxide in Microgrammes per cubic Metre of Air

1961	DAILY AVERAGE				HIGHEST DAILY AVERAGE				Y.W.C.A.
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Market Buildings	Blenheim	Hyde Terrace	Park Square	
January .	576	382	485	605	462	976	642	984	981
February .	516	294	454	533	448	1,304	645	944	921
March .	531	314	448	485	428	1,278	645	864	947
April .	343	216	323	395	306	615	366	555	787
May .	233	140	244	214	209	443	200	389	802
June .	222	118	260	197	188	326	216	409	744
July .	198	94	250	154	162	351	172	479	446
August .	198	91	188	155	162	357	169	365	313
September .	267	131	268	216	238	430	206	403	452
October .	377	215	406	369	362	864	324	1,045	321
November .	579	364	503	547	482	1,306	755	1,467	672
December .	810	771	723	909	859	1,896	2,141	1,996	1,017

DEPOSIT GAUGES RECORDS, 1931-1961
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year	STATIONS						Roundhay	
	Headingley	City Centre	York Road	Hunslet	Temple-newham	Armenley Park	St. James's Hospital	Burley Park
1931..	126.5	336.2	*266.9	268.5	109.3	..	..	..
1932..	105.8	320.7	264.7	255.8	87.5	..	..	..
1933..	107.86	305.0	277.83	*256.32	*81.59	..	..	..
1934..	124.28	341.7	284.74	294.49	86.24	..	..	..
1935..	*131.92	358.88	321.25	*317.55	108.67	..	..	..
1936..	136.95	381.49	301.89	290.13	*118.20	..	..	..
1937..	135.93	*321.53	325.35	301.71	*123.39	..	..	..
1938..	*119.80	359.51	289.56	*231.39	133.37	..	..	..
1939..	155.32	314.96	255.15	*234.74	122.67	..	..	..
1940..	1180.30	*413.29	247.36	*279.58	*243.33	..	..	..
1941..	1188.31	*285.51	3129.75	*301.31	164.21	..	..	..
1942..	1138.21	*371.14	..	*235.37	*159.03	..	..	..
1943..	186.93	389.03	..	271.82	171.43	..	..	..
1944..	175.37	374.50	..	277.14	*114.80	..	..	..
1945..	*151.29	*288.44	..	*262.11	*139.27	..	..	..
1946..	*146.50	326.26	..	*267.10	*166.64	\$176.12	\$87.27	..
1947..	1121.94	288.76	..	*209.66	149.12	*367.06	*183.13	..
1948..	162.78	338.02	..	213.49	*134.68	327.56	211.20	..
1949..	181.24	411.91	..	225.68	164.28	414.14	220.55	630.62
1950..	195.36	378.57	..	206.31	147.62	494.91	205.88	664.56
1951..	*228.04	403.97	..	229.99	162.32	532.86	*199.00	714.33
1952..	*135.00	356.58	..	199.43	126.34	370.85	*184.39	430.99
1953..	159.28	348.84	..	183.17	117.59	400.56	182.72	516.50
1954..	184.21	354.14	..	*1245.99	*109.14	383.11	208.49	453.34
1955..	*115.74	288.50	..	*316.83	*120.47	296.30	177.16	*272.78
1956..	*129.81	287.22	..	*359.44	*100.97	284.95	195.15	319.63
1957..	125.46	264.27	..	385.63	*140.30	239.06	188.00	268.70
1958..	*115.75	265.82	..	*440.80	*98.64	249.96	212.94	*204.88
1959..	134.67	243.59	..	*1254.57	*131.86	*189.03	261.97	*111.93
1960..	149.89	258.78	..	*260.89	145.18	*269.04	229.87	314.61
1961..	148.08	303.75	..	*226.22	192.16	252.88	232.94	351.27

|| 9 months

† 10 months

* 11 months

STANDARD DEPOSIT GAUGES.
MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE.
YEARS 1960 AND 1961.

Period	STATIONS																								
	Headingley			Market Buildings			Hunslet			Temple Newsam			Armley Park			St. James's Hospital			Burley Park			Roundhay			
1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961		
January ..	11.97	17.67	25.49	33.71	22.44	28.42	15.17	18.43	33.67	33.53	19.41	25.56	26.86	49.70	11.79	11.79	15.38								
February ..	17.34	13.49	23.72	29.01	33.76	†	10.11	17.51	30.51	22.26	22.07	23.92	53.27	48.42	11.39	15.66									
March ..	12.37	5.34	18.73	15.58	29.85	13.28	8.98	12.65	24.94	7.23	26.74	12.49	17.44	13.45	8.99	8.99	8.48								
April ..	8.94	19.98	15.62	36.25	31.87	34.67	9.31	18.77	†	38.86	15.74	25.50	17.11	38.86	8.52	8.52	17.74								
May ..	9.01	6.74	17.60	16.87	25.05	21.06	15.88	17.74	16.86	13.59	23.28	19.37	21.66	15.44	8.68	8.68	13.17								
June ..	10.46	5.05	14.72	16.44	13.67	12.95	9.97	10.79	20.65	16.52	17.65	12.09	24.85	15.02	9.67	9.67	9.36								
July ..	9.96	18.47	20.37	24.60	14.67	15.34	15.02	13.72	18.31	16.12	14.90	15.10	12.52	32.22	10.44	10.44	9.26								
August ..	11.65	8.22	25.76	18.82	†	11.95	8.21	14.62	16.29	11.83	15.20	11.49	17.08	15.87	12.33	12.33	8.15								
September ..	11.32	13.67	18.72	27.05	15.07	22.09	10.29	15.12	14.43	17.16	15.57	19.58	24.77	38.67	9.29	9.29	15.68								
October ..	12.91	14.79	23.46	27.18	31.89	18.71	9.65	14.99	23.25	18.38	17.29	26.00	14.06	33.34	9.67	9.67	12.06								
November ..	23.54	10.78	30.58	26.18	20.73	17.78	17.91	15.06	35.06	24.33	24.90	17.16	45.96	19.20	16.22	16.22	9.52								
December ..	10.42	13.88	24.01	32.06	21.89	29.97	14.68	22.76	35.07	33.07	17.12	23.78	39.93	31.08	12.03	12.03	16.21								
Total Deposit for Year ..	149.89	148.08	258.78	303.75	260.89	226.22	145.18	192.16	269.94	252.88	229.87	232.04	314.61	351.27	129.02	150.67									
Monthly average	12.49	12.34	21.57	25.31	23.72	20.57	12.10	16.01	24.46	21.07	19.16	19.34	26.22	29.27	10.75	10.75	12.56								

† Gauge tampered with.

ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD DIOXIDE METHOD.
(Weight of SO_3 calculated per 100 square centimetres of exposed fabric in milligrammes per day)

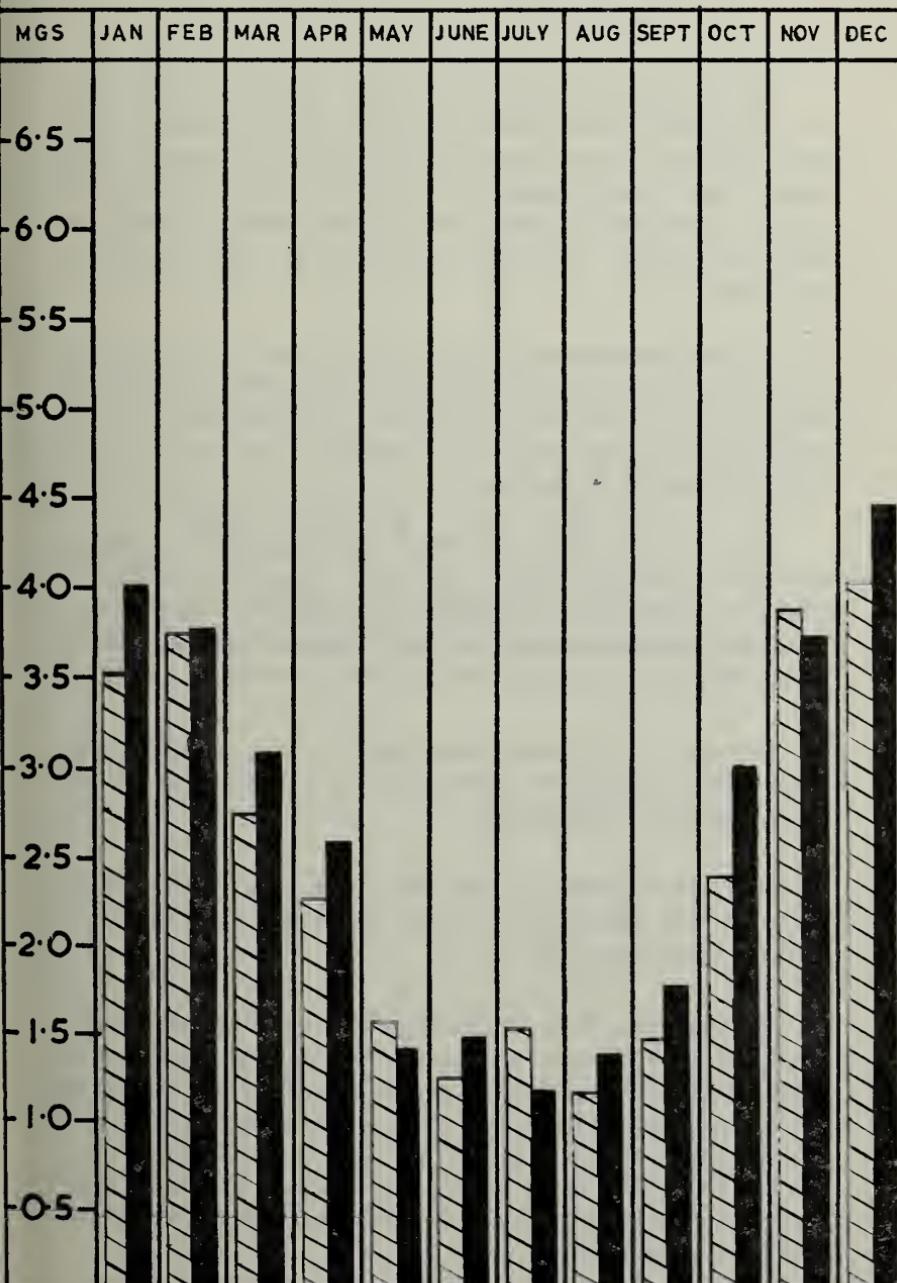
STATIONS

Period	STATIONS												Armley Park			St. James's Hospital			Burley Park			Roundhay			
	Headingley			Market Buildings			Hunslet			Temple Newsam			Armley Park			St. James's Hospital			Burley Park			Roundhay			
	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961	
January	3.11	2.74	4.99	5.72	4.04	3.83	3.63	4.54	3.33	3.53	2.99	5.36	3.89	3.91	2.18	2.62									
February	..	3.30	3.37	5.51	5.31	4.12	2.94	3.83	4.89	3.29	3.35	3.72	4.54	3.58	4.20	2.30	2.24								
March	..	2.60	2.60	4.34	4.79	3.88	2.95	1.92	4.98	3.18	2.74	1.92	1.44	2.54	3.48	1.42	2.11								
April	..	1.89	2.69	3.43	4.06	2.21	2.58	2.71	1.97	2.24	3.01	1.95	2.62	2.41	2.44	1.31	1.54								
May	..	1.45	1.46	2.19	1.72	1.53	1.90	1.50	1.12	1.70	*	1.91	1.67	1.39	1.27	0.95	0.79								
June	..	1.07	1.17	1.84	2.16	1.15	1.28	1.58	1.82	1.16	1.17	1.30	1.76	1.06	1.12	0.85	1.31								
July	..	1.08	0.89	2.49	2.16	1.30	1.43	1.80	1.54	1.32	0.96	2.06	1.33	1.23	1.00	0.87	0.56								
August	..	1.02	1.15	1.89	2.13	1.13	1.31	1.34	2.34	1.07	1.06	1.44	1.36	0.88	1.14	0.67	0.81								
September	..	1.41	1.39	2.22	2.63	1.37	1.78	1.49	1.95	1.69	1.55	1.45	2.03	1.21	1.48	0.91	1.22								
October	..	2.25	3.00	4.17	4.41	3.06	2.35	1.85	3.48	2.29	2.67	2.33	4	2.01	2.90	1.35	2.02								
November	..	2.96	2.78	5.42	5.88	5.39	3.61	3.99	3.72	3.31	2.98	4.08	4.39	3.58	3.32	2.47	2.05								
December	..	3.42	†	5.95	6.75	3.88	4.10	4.99	5.19	3.19	3.72	5.12	§	4.13	4.65	2.75	2.45								
Monthly average		2.13	2.11	3.70	3.98	2.76	2.51	2.55	3.13	2.31	2.43	2.65	2.33	2.38	1.50	1.64									

* Cylinder knocked over during month—no results † Cylinder coating damaged—no results
 ‡ Cylinder broken during period of exposure—no results § Cylinder stolen—no results

SULPHUR EMISSION — 1961

AMOUNT OF SO_3 IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETERS
MONTHLY AVERAGE OF ALL STATIONS



— 1960



— 1961

PUBLIC HEALTH INSPECTORIAL STAFF

The Department suffered a great loss in the death of Mr. H. P. Gill, Supervisory Public Health Inspector, on 21st January, 1961. Mr. Gill joined the Department in 1927 and was appointed Supervisory Public Health Inspector, Housing Division, in 1947. His work in connection with the Council's Slum Clearance Programme and his knowledge of housing conditions in the city were greatly appreciated.

At the commencement of the year there were five vacancies for public health inspectors and three further vacancies occurred in the early part of the year due to the death of one inspector, the retirement of another, and one inspector resigned to take up an appointment with another Authority.

Three student public health inspectors completed their training with the Department later in the year, successfully passing the qualifying examination of the Public Health Inspectors' Examination Board and were appointed public health inspectors to fill vacancies. At the end of the year there were still five vacancies.

During 1961, six public health inspectors were successful in the Examination for Inspectors of Meat and Other Foods; four obtained Smoke Inspectors' Certificates.

Mr. J. Goodfellow, F.R.S.H., M.I.P.H.E., Chief Public Health Inspector, was elected to be one of the Deputy Chairmen of the National Society for Clean Air.

Training.—Six Leeds Health Department student public health inspectors attended the second year of the full-time training course at the Leeds College of Technology, the remaining nine commenced as first year students. Practical training in all aspects of the public health inspector's work was again provided by the Department. It will not be possible to fill the existing vacancies for public health inspectors from the present quota of students until the second year students qualify in 1964.

**Report of the
City Analyst**

CITY ANALYST'S LABORATORY

BY

R. A. DALLEY, F.R.I.C.,
City Analyst

The total number of samples received for analysis during 1961 was 8,498, this being some 400 less than last year's record number of 8,946 samples. The decrease was entirely accounted for by samples requiring a relatively quick and straightforward examination (daily atmospheric tests, chemical and bacteriological milk samples). Almost all other branches of the work showed an increase, this being particularly marked in respect of food and drug samples other than milk, radioactivity determinations, and analyses for H.M. Coroner. Undoubtedly the nett result was an increase in the overall output of work and the laboratory operated under considerable strain in respect of both manpower and accommodation.

There was also an increase in those aspects of the work which are not represented by physical samples, notably the answering of many enquiries from industrial firms and members of the public. Lectures on the work of the laboratory were given to various organisations within and outside the city and customary visits from teachers, groups of science students and others took place throughout the year.

Once again it is a pleasure to express to my Deputy, Mr. L. A. Perkin, and all members of the staff my appreciation of the efficient manner in which they have met the heavy demands placed upon them. I also welcome the opportunity of thanking the Supervisory Sampling Officer, Mr. H. Long, and his assistants for their continued ready co-operation.

The following is a summary of the analyses made during 1961 :—

Samples submitted by the Public Health Department

Food and Drug samples	3,443
Milks for Bacteriological examination	620
Ice-cream for Bacteriological examination ..	50
Radioactivity measurements	89
Fertilisers and Feeding Stuffs	14

ATMOSPHERIC POLLUTION

Deposit Gauges	107
Lead Peroxide Cylinders	93
Daily Smoke and Sulphur Dioxide determinations	3,463
	3,663
Miscellaneous samples	80
	7,959

Samples submitted by Other Departments

Central Purchasing Department	8
City Coroner	107
City Engineer's Department	28
Cleansing Department	1
Education Department	14
Transport Department	23
Waterworks Department	12
Works Department	1
	194

Samples received from Other Sources

Private samples	80
Craven District Coroner	7
Leeds Group "A" Hospital Management Committee	11
Leeds Group "B" Hospital Management Committee	3
Rothwell Urban District Council	6
Wakefield City Council	235
York City Council	3
	345
	8,498

FOOD AND DRUGS

The table on pages 266 to 271 summarises the samples taken under the Food and Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 3.3 per cent. compared with 3.0 per cent. in 1960 and 4.4 per cent. in 1959.

The table on page 184 lists the results of summonses issued in respect of those adulterated samples concerning which legal proceedings were instituted.

MILK:—

The average composition of the 2,634 samples submitted is shown in the following table, the corresponding figures for the last two years being given for comparison:—

AVERAGE COMPOSITION OF MILK

	1961	1960	1959	Minimum legal requirement
Number of samples ..	2,634	2,873	2,512	
Solids-not-fat	8.69%	8.73%	8.72%	8.50%
Fat	3.74%	3.75%	3.70%	3.00%
Total solids ..	12.43%	12.48%	12.42%	11.50%

The adulteration rate was 2.1 per cent. compared with 1.8 per cent. for each of the previous three years.

Of the 56 unsatisfactory samples 45 contained added water, 4 were fat deficient, 6 contained traces of blood, and one (submitted as a complaint by a member of the public) contained a trace of disinfectant. The highest amount of added water was 10.6 per cent., and the greatest fat deficiency 13.0 per cent.

Prosecutions were successfully instituted against three farmers, each in respect of a series of watered milks, and against the proprietor of a milk bar for selling a glass of hot milk containing 10.6 per cent. of added water.

335 milk samples (337 in 1960) had solids-not-fat of less than 8.5 per cent., and therefore added water was suspected, but in each case the freezing point showed the deficiency to be due to natural causes (i.e. cows giving poor quality milk), and not to added water.

The high proportion of such naturally poor milk has been commented upon in several recent Annual Reports. The recent decision of the Milk Marketing Board to introduce a differential payments scheme under which producers will be paid a bonus for milk of above average quality, and a lower price for sub-standard milk, should do much to improve this situation.

FOODS OTHER THAN MILK:—

The number of such samples increased for the fifth successive year totalling 769, compared with 679 last year and 135 in 1956. Of these 52 (6.8 per cent.) were unsatisfactory.

Details of the more interesting cases of adulteration together with comments upon a few of the genuine samples will be found in the following paragraphs.

Sausages.—Of 37 samples received during the year 3 were reported against for having meat contents below the recognised minimum standards of 50 per cent. for beef and 65 per cent. for pork sausages. The unsatisfactory samples had meat contents of 44 per cent. (beef), 47 per cent. (pork), and 63 per cent. (pork). One sample of pork sausage, whilst possessing a satisfactory meat content, contravened the Preservative Regulations in that it contained sulphur dioxide preservative without declaration of its presence.

The average meat content was 59.3 per cent. for beef sausages (21 samples), and 68.2 per cent. for pork (14 samples).

Stewed Steak in Gravy (Canned).—Two samples each contained only 63 per cent. of meat. Although there is at present no legal standard for the meat content of this commodity, it is considered that the level should not fall below 70 per cent. In the days of meat rationing a 75 per cent. standard was required.

Minced Chicken (Canned) contained only 89 per cent. chicken instead of the agreed minimum of not less than 95 per cent. Two tins of *Boned Chicken in Jelly* bore labels which were considered to be misleading in several respects. Seen from a few feet away the only words that could be read were " Devon Farm Boned Chicken " accompanied by an illustration of typical Devon thatched cottages. Close examination revealed the words " In Chicken Jelly " and " Produce of Holland " in very small print. The meat content found on analysis was satisfactory for an article described as " Boned Chicken in Jelly ", but was insufficient for an article described simply as " Boned Chicken ". Proceedings were instituted under the Merchandise Marks Acts and the Food & Drugs Act, a fine of £50 plus 65/- costs being imposed.

Shredded Suet contained only 76 per cent. of fat instead of the minimum legal requirement of 83 per cent.

Canned Fruit.—10 of the 74 samples submitted were unsatisfactory. Since 1958 British Canners have complied with a Code of Practice prescribing a minimum weight of fruit per can, together with minimum syrup strengths. Five cans described as " Strawberries in Heavy Syrup " contained less than the required weight of fruit and were canned in " Light " not " Heavy " Syrup (' Heavy Syrup ' must contain at least 40 per cent. of sugar, ' Light Syrup ' only 20 per cent.). The contents of four other cans contained sufficient fruit, but insufficient sugar to justify the description " Heavy Syrup ". One sample, whilst satisfactory as regards both fruit content and syrup strength failed to declare on the label the presence of artificial colouring matter. All the unsatisfactory samples were imported ; the importers agreed to ensure that the composition and labelling of future supplies were improved so as to conform with the Code of Practice adopted by British Canners.

Creamed Rice Milk Pudding was stated on the label to have been made with full-cream milk, rice and sugar, but contained 18 per cent. of added water. In control tests many other brands of this commodity were analysed—most contained no added water, but small amounts (up to 7 per cent.) were present in some samples. Proceedings were instituted against the manufacturer of the sample containing 18 per cent. added water. After completion of the case for the Prosecution

the Hearing was repeatedly adjourned and it was finally decided to withdraw the charge on the manufacturer giving an undertaking in Court that in future his canned rice pudding would not contain more than 7 per cent. added water.

Another brand of **Canned Rice Pudding** bore the words "Now with Glucose" in large type across the front of the label. This pudding was free from extraneous water, but contained less than 0.5 per cent. glucose. Since this quantity of glucose could have no significant nutritional effect the claim for its presence was considered to be misleading and therefore to infringe the Food & Drugs Act. The manufacturers evidently shared this opinion for, when their attention was drawn to it, they immediately agreed to remove the offending words.

Cream Cheese.—The sample contained only 35 per cent. of fat, indicating that it had not been made from genuine cream, but from a mixture of cream and milk. Cheese made from genuine cream contains not less than 50 per cent. of fat.

Chocolate Cream Roll was deficient in cocoa content and filled with imitation cream.

Cake with Butter-cream Filling was considered to be falsely described since the fat portion of the filling consisted of two thirds margarine and only one third butter.

Flour.—One sample was 46 per cent. deficient in Creta Praeparata; another sample was 100 per cent. deficient in this nutrient and was also 49 per cent. deficient in iron content, compared with the amounts legally required under The Flour (Composition) Regulations.

Bitter Beer contained 19 per cent. of added water compared with the normal strength of the brew concerned.

Blackcurrant Health Drink claimed to contain Vitamin C and the label should, therefore, have stated the minimum quantity of Vitamin C per fluid ounce. No such particulars were given.

Honeyjel failed to comply with the requirements of the Labelling of Food Order in that the presence of added pectin was not declared on the label.

Marzipan was considered to be "not of the quality demanded by the purchaser" in that the block was rock-hard and impossible to mould.

Colouring Matter in Food.—All samples were examined for the presence of artificial colouring matter, which, when present was separated and identified in order to ensure that it was one of the colours approved for inclusion in foodstuffs under the Colouring Matter in Food Regulations of 1957.

With the exception of three samples of *Sweets*, which contained a non-permitted blue dye (Brilliant Blue F.C.F.), all samples were satisfactory.

Samples submitted by the Public.—As usual members of the public submitted numerous samples possessing quality defects. These comprised: *Mineral Water* contaminated with phenolic disinfectant (3 samples) and with hydrogen sulphide (1 sample); a bottle of *Dandelion & Burdock* stated to be "flat and watery", and found on analysis to contain 75 per cent. of added water; a *Loaf* containing a house-fly (which tests proved had been baked in the loaf), and another *Loaf* containing several pieces of unbaked dough; a $\frac{3}{4}$ inch long piece of wire embedded in a *Biscuit*; *Custard Pies* well merited the complaint regarding their unpleasant flavour, which was due to fermentation and development of acidity in the custard filling (doubtless the result of overlong storage in a warm atmosphere); another complaint of unusual taste, this time in *Sugar* was found to be due to the presence of 0.15 per cent. of salt; the putrid condition of the contents of a tin of *Chopped Pork* had been caused by a small nail-hole in the bottom of the can; areas of mould growth were found in a *Pork Pie* and in a *Fruit Loaf*; *Canned Apricot Jam* contained a beetle and a lady-bird, and *Canned Tomatoes* the remains of several maggots; *Peppermint Creams* intended to be a soft confection were rock hard due to unsatisfactory packing and storage; *Cheese Spread* alleged to contain glass, in fact contained two very large crystals of sodium phosphate. (This harmless chemical is added to Cheese Spreads as an emulsifying agent, but under correct conditions of manufacture and storage it should not crystallize out).

DRUGS

4 of the 39 samples examined proved unsatisfactory. 3 of these were **Cough Preparations** which were found on analysis to be deficient in chloroform ; the difficulty in preventing some loss of this volatile ingredient is recognised, and a reasonable allowance is made, but the three samples referred to were grossly deficient.

A sample of **Slimming Bath Salts** consisted of a mixture of sodium bicarbonate and washing soda. Both the label and enclosed literature made extravagant (and in my opinion completely unjustified) claims regarding the slimming properties of the Bath Salts. On being informed of these views the manufacturer agreed to remove from the label and literature all references, direct or indirect, to slimming properties. Newly designed labels were submitted for scrutiny and were considered satisfactory.

BACTERIOLOGICAL SAMPLES

620 Milks and 50 Ice-Creams were submitted to the required tests, the results being shown in the tables below. The Methylene Blue Test measures the keeping quality of the milk, and the Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is only carried out on Sterilised Milk, shows whether or not such milk has been sufficiently heated.

MILK

Designation	Number examined	Unsatisfactory by			Percentage reported as unsatisfactory
		Methylene Blue test	Phosphatase test	Turbidity test	
T.T. Raw	169	4	..	..	2.4
Sterilised	94	..	..	..	..
Pasteurised :—					
Dairies	96	..	..	..	..
Schools	79	..	..	..	..
T.T. Pasteurised :—					
Dairies	182	..	..	..	..
Total	620	4	..	..	0.6

ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	33	73.3	Good
2.	3½ to 4 hours ..	5	11.1	Satisfactory
3.	½ to 2 hours ..	2	4.5	Unsatisfactory
4.	Nil	5	11.1	Very unsatisfactory
		*45	100.0	

* A further 5 tests were rendered invalid due to the overnight incubation temperature exceeding the stipulated figure.

It will be seen that 7 of the 45 samples of ice-cream (15.6 per cent.) were bacteriologically unsatisfactory. This represents an improvement compared with the previous two years when the proportion of unsatisfactory samples was 39.6 per cent. (1960) and 31.9 per cent. (1959).

RADIOACTIVITY

Prior to the year under review work under this heading had been mainly confined to routine monitoring of the city water. In January, 1961, the regular determination of radio-strontium in milk was commenced, and the resumption of nuclear tests by the Soviet Union in September was responsible for a further marked increase in the number of samples examined. The activity of the city water was determined weekly (instead of monthly), measurements of the activity in the atmosphere and in rainwater were instituted, and Iodine-131 in the local milk supply was determined during the period when this level was causing anxiety.

Air.—Under normal conditions no suitable equipment for air sampling is available in the Department. The marked increase in atmospheric radioactivity due to the Russian tests made it possible to measure the radiation in a comparatively small volume of air, and the deposits obtained in the normal daily determinations of smoke in the atmosphere were used for this purpose, those deposits filtered from the air each week-end (when the apparatus runs for 48 hours without interruption) being found the most suitable.

The following table shows the figures obtained :—

Date					Total Beta Activity Micro-micro curies/metre ³
21/22 October	..	..	..	..	3.4
28/29 October	..	..	..	..	1.5
4/5 November	..	..	..	..	5.1
11/12 November	..	..	..	..	5.6
18/19 November	..	..	..	..	6.7
25/26 November	..	..	..	..	3.3
3/4 December	..	..	..	..	2.8
10/11 December	..	..	..	..	3.6
17/18 December	..	..	..	..	3.1
24/27 December	..	..	..	..	2.8
Average January-August 1961 (Courtesy of the Scientific Adviser, London County Council)					0.05

Figures obtained by this method tend to show wide day-to-day variation. A high figure may be due to the filter catching a single particle of high activity, whilst sudden drops (such as the week-end of 28/29 October) are usually due to heavy rain which quickly washes radioactive particles from the air.

Rainwater.—Rainwater provides a very sensitive means of measuring fall-out since the falling rain scrubs the radioactive particles from a very large volume of air. A special gauge to collect rainwater for this purpose was set up on the roof of Market Buildings within a few days of the first Russian test explosion and measurements have since been made weekly.

Fortunately a sample of August rainwater used for normal atmospheric pollution determinations was still available, so that it was possible to obtain a measure of the amount of activity in the rainwater immediately before the Russian tests.

Individual weekly figures have shown very wide variations depending upon the rainfall, but these have been very largely evened

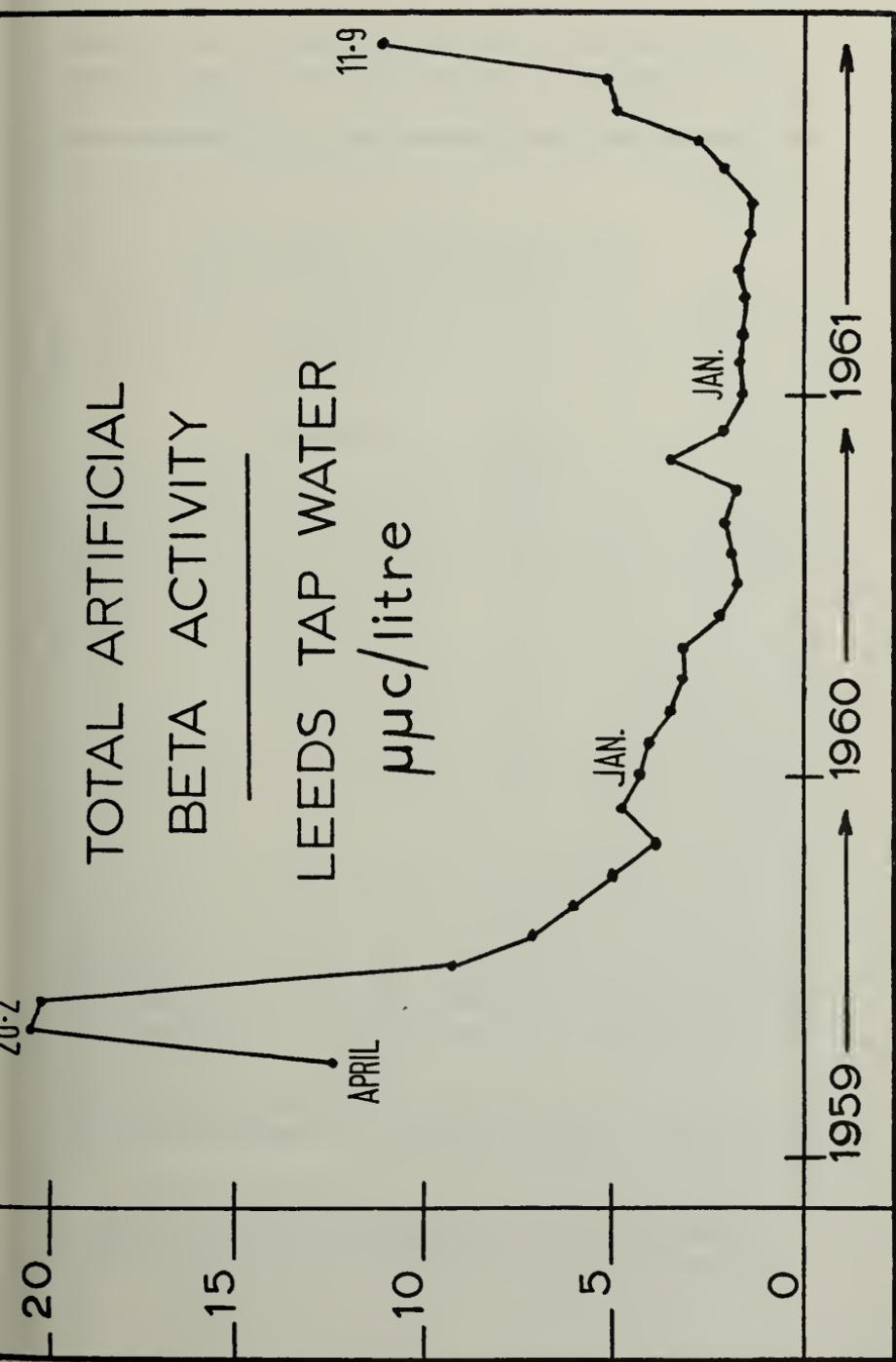
out by taking monthly averages. Results are shown in the following table :—

Month		Volume collected (Litres)	Activity	Activity falling per metre ² per day
August	..	4.00	8 uuc/litre	15 uuc
September	..	5.80	62 uuc/litre	160 uuc
October	..	5.70	1085 uuc/litre	2610 uuc
November	..	2.60	3190 uuc/litre	3610 uuc
December	..	5.15	1640 uuc/litre	3560 uuc

The figures may appear more alarming than the facts warrant. Most of the isotopes which go to make up the above totals are comparatively innocuous and possess short half-lives. The bulk of the radioactivity in rainwater is lost before the water reaches the public supply.

Drinking Water.—The very low level of activity existing at the beginning of 1961 further decreased during the first half of the year. The Russian tests were followed by a steady increase in activity, but (as shown by the attached graph), at the end of the year the level was still below the maximum reached in the Spring of 1959 when fall-out from the 1958 tests was at its peak.

It should be emphasised that the figures on the graph refer to " Total Artificial Activity ". In the first twelve months following a nuclear explosion the dangerous Strontium-90 isotope constitutes only a minute proportion of the total. This is one of the reasons why determinations of Total Activity whilst providing useful and interesting information as to trends and changes in radioactivity, are of limited value in assessing possible hazards to health. For the latter purpose it is necessary to carry out a lengthy radio-chemical analysis in order to determine specific isotopes. Some determinations of this nature are reported in the next section.



Milk.—A portion of each sample of milk received for routine chemical analysis (approximately 250 samples per month) is put on one side and the resulting bulked samples are examined monthly. The determination requires a lengthy and involved separation and takes about eight weeks to complete. The results are shown in the table below :—

Month	Micro-micro curies per litre		Ratio	Sr-89 Sr-90
	Sr-89	Sr-90		
January	Nil	4.9	..	
February	Nil	6.2	..	
March	Container broken	..	..
April	Nil	5.5	..	
May	Nil	6.8	..	
June	Nil	5.1	..	
July	Nil	5.7	..	
August	Nil	4.6	..	
September	13.4	3.8	3.5	
October	82.6	3.9	21.2	
November	96.4	4.8	20.1	
December	16.1	2.9	5.6	

Strontium-89 has a relatively short half-life (53 days), whereas Strontium-90 has a long half-life (28 years). No Strontium-89 remained from the 1958 atomic tests and its re-appearance in September was proof of the presence of fresh fission products.

During the period when the presence of Iodine-131 in milk was causing anxiety, samples representative of the local supply were examined twice weekly.

The level of activity in bulk milk never exceeded the figure of 130 micro-micro curies per litre pronounced by the Medical Research

Council as the danger level for babies if *continuously consumed for 12 months*. In mid-November two samples of milk taken direct from farms exceeded this figure, but such isolated instances are to be expected and give no cause for alarm. At the end of November the level started to fall rapidly, and by late December was so insignificant that determinations were discontinued.

FERTILISERS AND FEEDING STUFFS

12 Fertilisers and 2 Feeding Stuffs were submitted. The only sample failing to comply with the Statutory Statement was **Dried Blood** which proved to be slightly deficient in nitrogen.

ATMOSPHERIC POLLUTION

The measurement of atmospheric pollution in the city, using deposit gauges and lead peroxide candles, has continued at the same eight stations as in previous years. The additional temporary gauge at Sayner Lane (a site where there have been complaints of particularly bad pollution) was also continued. The results are shown in the table below :—

STATION	DEPOSIT GAUGES		LEAD PEROXIDE CANDLES	
	Average monthly deposit in tons per sq. mile		Average daily sulphur pollution as mgrms. of SO_3 per 100 sq. cms. of exposed surface	
	1961	1960	1961	1960
Armley Park	21.1	22.4	2.4	2.3
Burley Park	29.3	26.2	2.6	2.3
Headingley	12.3	12.5	2.1	2.1
Hunslet	20.6	23.7	2.5	2.8
Market Buildings	25.3	21.6	4.0	3.7
Roundhay	12.6	10.7	1.6	1.5
St. James's Hospital	19.3	19.1	2.6	2.5
Temple Newsam	16.0	12.1	3.1	2.5
Sayner Lane (Temporary)	61.4	67.2	..	..
Average of all permanent sites	19.6	18.5	2.6	2.5

The daily measurements of Smoke and Sulphur Dioxide in the atmosphere have also continued using the apparatus installed in the

laboratory and at the four sites within the proposed Central Smoke Control Area. The results are summarised in the following table :—

STATION	SMOKE		SULPHUR DIOXIDE	
	Microgrammes per cubic metre		Microgrammes per cubic metre	
	Daily Average		Daily Average	
	1961	1960	1961	1960
Blenheim ..	310	300	261	214
Hyde Terrace ..	308	270	356	303
Market Buildings ..	298	310	404	429
Park Square ..	284	270	398	371
Y.W.C.A. ..	284	250	359	488

MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

An innovation during the year was the submission of samples of swimming bath waters for chemical analysis. Previously in Leeds such samples had only been taken for bacteriological examination. The value of chemical tests was at once made apparent for several of the early samples were extraordinarily acid (pH as low as 2.9 compared with the recommended range of 7.5 to 8), contained little or no free chlorine, and high amounts of free and albuminoid ammonia (indicative of pollution).

Remedial action was quickly taken and subsequent samples have been much more satisfactory.

The acid waters would undoubtedly produce marked smarting of the eyes, and it is hoped that as a result of this work swimmers in the baths concerned will enjoy more comfortable swimming conditions.

15 samples of drinking water were analysed, 3 samples of sewage, and 11 waters from flooded premises for determination of origin.

6 chemicals from a local factory were examined for possible nuisance effect in the immediate area around their place of manufacture.

Both the outer paint and the inner core of 13 coloured pencils were examined for the presence of lead chromate. This chemical (which might present a hazard to any children who habitually suck or chew their pencils) was found to be present in four pencils (all from the same manufacturer).

SAMPLES SUBMITTED BY OTHER CORPORATION DEPARTMENTS

Central Purchasing Department.—6 liquid detergents and 2 soap powders were analysed.

City Coroner.—A record number of 107 specimens was analysed in connection with 35 deaths. The possibility of poisoning as a cause of death was excluded in four cases where no drugs (or only therapeutic doses) were present. As usual barbiturates were responsible for the greatest number of deaths, the actual drugs concerned being Nembutal (5 cases), Amytal (4 cases), Tuinal (4 cases), Carbitral (2 cases), Soneryl (2 cases) and Seconal. Four deaths were due to gross overdoses of Aspirin (in one case taken in the form of Compound Codeine Tablets), whilst Chloral hydrate, Glutethimide and Carbon Monoxide were each responsible for one death. There were two cases of Strychnine poisoning in each of which the victim was an 18-month-old baby who had swallowed Easton's Tablets prescribed for an adult in the households concerned. The sugar-coating on these tablets makes them particularly attractive to small children, to whom 3 tablets may constitute a fatal dose. When these (or indeed any other drugs) are issued on prescription no warning of their dangerous nature need be given on the container. Whilst it is axiomatic that all drugs should be kept out of the reach of children, amendment of the present Poison Rules so as to require a prominent warning label in appropriate cases, would almost certainly save a number of lives each year.

The remaining four cases involved determinations of blood alcohol and estimations of the quantity of intoxicating liquor consumed by persons killed in road accidents. In the worst of these cases, the results indicated that the dead driver had consumed the equivalent of 20 pints of beer.

City Engineer's Department.—28 Trade Effluents were analysed for determination of chromium contents.

Cleansing Department.—A sample of soil was analysed.

Education Department.—12 samples of sausages and 2 of fish fingers supplied to the School Meals Service were analysed. Two samples of sausages were slightly deficient in meat protein compared with the contract specification.

Transport Department.—23 samples of fuel oil were analysed.

Waterworks Department.—The customary independent analysis of the City Water was carried out each month. Apart from an occasional high iron content (largely accounted for by the fact that the laboratory is situated at the end of a main), all samples proved satisfactory.

Works Department.—The deposit from the flue of a boiler plant was found to consist entirely of iron sulphate formed by the action of sulphur gases on the iron flue pipes.

SAMPLES RECEIVED FROM OTHER SOURCES

Private Samples.—The 80 samples classified under this heading involved the usual wide variety of investigations.

57 samples of foodstuffs (comprising milk, cream, fresh fruit, dried fruit, tea, liqueur, and fish cakes), were analysed for local firms, as also were two fertilisers. Other privately submitted samples comprised water (6 samples), 3 chemical solutions (for standardisation and subsequent use in examinations), 3 samples of petrol, liquid ammonia (2 samples), hair colourant, galvanised iron piping, carbon, soil, and two insects for identification.

Craven District Coroner.—7 specimens were analysed in connection with two deaths. In one case an overdose of the drug Antrenyl was found (although death was due to natural causes), in the other a determination of blood alcohol was required.

Leeds Group "A" Hospital Management Committee.—11 samples of Orange Squash were analysed in order to provide information for placing a tender for this commodity.

Leeds Group "B" Hospital Management Committee.—One sample of Shredded Suet and two boiler water condensates were analysed.

Rothwell Urban District Council.—6 samples of water were analysed.

Wakefield Corporation.—142 Food and Drug samples, 5 Fertilisers, 71 Atmospheric Pollution Samples, 15 Waters (including 12 for radioactivity measurements) and 2 samples of air were analysed.

York Corporation.—2 samples of air and one dust deposit were analysed.

FOOD AND DRUGS ACT, 1955.
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961.

Article	Number examined	Number unsatisfactory
FOODS (3,404)		
Almonds, ground..	3	..
Almond spread ..	1	..
Aspic jelly powder ..	1	..
Baby foods ..	2	..
Bacon ..	1	..
Baking powder ..	5	..
Barley, pearl ..	1	..
Beer ..	17	1
Biscuits ..	7	1
Black pudding ..	1	..
Borscht ..	1	..
Bread ..	3	3
Breadcrumbs ..	1	..
Breakfast cereals ..	2	..
Butter ..	8	..
Buttered teacake ..	1	..
Cakes ..	13	3
Cake decorations ..	6	..
Cake and pudding mixtures ..	15	1
Calf's foot jelly ..	1	..
Cheese and cheese preparations ..	18	2
Cherries, glacé ..	4	..
Chicken and chicken preparations (canned and bottled) ..	15	3
Chinese Chow Chow ..	1	..
Chocolate ..	4	..
Cloves ..	1	..
Coconut, desiccated and coconut cream ..	3	..
Coffee and coffee essence ..	5	..
Condiment, non-brewed ..	1	..
Crab (canned) ..	4	..
Carried forward ..	146	14

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961—*continued*

Article	Number examined	Number unsatisfactory
Brought forward	146	14
Cream (canned, bottled, soured, imitation)	7	..
Curry powder	6	..
Custard powder and cornflour	4	..
Dehydrated foods	2	..
Eggs and egg preparations	3	..
Fish (canned)	14	..
Fish fingers, fish cakes and savouries ..	7	..
Fish, smoked	1	..
Fish paste	4	..
Flavouring	1	..
Flour	5	1
Food colouring	6	..
Fruit (canned and bottled)	74	10
Fruit, dried	24	..
Fruit, fresh	17	..
Fruit juice	5	..
Fruit pies	2	..
Gelatine	2	..
Ginger, ground	4	..
Glucose and glucose preparations ..	6	..
Gravy salt and powder	3	..
Hamburgers	1	..
Honey	3	..
Honey jel	1	1
Ice-cream and ice lollies	9	..
Ice-cream powder	6	..
Jellies	12	..
Jelly figs	1	..
Lard, cooking fat and oils	13	..
Liqueur chocolates	1	..
Carried forward	390	26

FOOD AND DRUGS ACT, 1955
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961—*continued*

Article			Number examined	Number unsatisfactory
Brought forward	..	..	390	26
Macaroni	..	..	1	..
Margarine	..	..	7	..
Marzipan	..	..	3	1
Mayonnaise and salad cream	..	..	7	..
Meat paste	..	..	2	..
Meat Products (canned):				
Bacon and Mushrooms	..	..	1	..
Beef, corned and corned beef hash	..	..	3	..
Beef, minced with onion and gravy	..	..	1	..
Braised steak in gravy	..	..	1	..
Chili Con-Carne	..	..	1	..
Ham and chicken roll	..	..	1	..
Hamburgers in Barbecue sauce	..	..	1	..
Lamb chops with Vegetables and gravy	..	..	2	..
Lamb tongues	..	..	1	..
Pork, chopped	..	..	2	1
Pork tongues and brawn	..	..	2	..
Pork luncheon meat	..	..	1	..
Risotto and Ravioli	..	..	3	..
Smoked Ham and Beef	..	..	1	..
Steak and kidney pie	..	..	1	..
Steak and kidney pudding	..	..	1	..
Stewed steak	..	..	5	..
Stewed steak in gravy	..	..	4	2
Stuffed pork roll	..	..	2	..
Veal curry	..	..	1	..
Meringue powder	..	..	1	..
Milk	..	..	2,580	56
Milk, Channel Island	..	..	55	..
Milk, condensed (canned)	..	..	9	..
Carried forward	..	..	3,090	86

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961—*continued*

Article		Number examined	Number unsatisfactory
Brought forward	...	3,090	86
Milk powder, skimmed	...	2	..
Milk shake powder and syrup	...	3	..
Milk puddings (canned)	...	14	2
Mint and mint jelly	...	2	..
Mushrooms (canned)	...	1	..
Mustard	...	4	..
Nut mix	...	1	..
Nutmeg, powdered	...	2	..
Oatmeal	...	1	..
Olive oil	...	1	..
Onions, cocktail	...	2	..
Parsley, dried	...	1	..
Peas, dried	...	2	..
Peanut butter	...	1	..
Pepper	...	4	..
Pickles and sauces	...	19	1
Polony	...	1	..
Pork pie	...	1	1
Prawns (frozen and canned)	...	3	..
Preserves	...	21	1
Puddings, ready made	...	4	..
Puff pastry	...	1	..
Rennet, essence of	...	2	..
Rice	...	4	..
Saccharin tablets	...	2	..
Sausages	...	37	4
Sausage filler	...	1	..
Semolina	...	1	..
Shrimps, peeled	...	1	..
Slimming breads and biscuits	...	5	..
Soft drinks and soft drink powders	...	32	6
Carried forward	...	3,266	101

FOOD AND DRUGS ACT, 1955.
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961—*continued*

Article	Number examined	Number unsatisfactory
Brought forward	3,266	101
Soup (canned and powdered)	6	..
Soya flour	1	..
Spaghetti (canned)	2	..
Spice, mixed	1	..
Spirits	11	..
Steak pie	1	..
Strawberry Mousse (frozen)	1	..
Stuffing	2	..
Suet, shredded	5	1
Sugar	1	1
Sweets	49	4
Syrup	1	..
Tapioca	1	..
Tea	4	..
Toffee apples	1	..
Tomatoes and tomato juice (canned) ..	9	1
Tongue, pressed	1	..
Turkey in Jelly (bottled)	2	..
Vanilla Sugar	1	..
Vegetables (canned)	24	..
Vinegar	4	..
Wines	9	..
Yeast extract	1	..
DRUGS (39)		
Amplex tablets	1	..
Antiseptic lozenges	2	..
Aspirin	1	..
Back and kidney pills	1	..
Bicarbonate of soda	1	..
Cod liver oil	1	..
Carried forward	3,411	108

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1961—*continued*

Article		Number examined	Number unsatisfactory
Brought forward	...	3,411	108
Chilblain oil	..	1	..
Compound codeine tablets	..	2	..
Cough mixtures, lozenges, pastilles and tablets	..	11	3
Cream of tartar	..	2	..
Fever mixture	..	1	..
Indian brandee	..	1	..
Laxative preparations	..	2	..
Liver pills	..	1	..
Massage cream	..	1	..
Olive Oil (B.P.)	..	1	..
Pain killing tablets	..	1	..
Slimming bath salts	..	1	1
Soberettes	..	1	..
Travel sickness tablets	..	1	..
Veganin tablets	..	1	..
Yeast tablets and flakes	..	4	..
TOTAL FOOD AND DRUGS	..	3,443	112

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